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ABSTRACT

This monograph applies ideas from the field of role theory to the study of occupations, beginning with an historical overview of role theory concepts. The analysis of occupations is presented from both a group-centered and person-centered position. Within the group-centered analysis, organizations, work groups, and communities are discussed, and types of social relationships are delineated. In the person-centered analysis, situs and station concepts are introduced and discussed. Some of the dimensions of roles useful in analyzing occupational structure are studied, including orientation to group boundaries, span of association, and dominance. Four independent variables--culture, personality, situation, and interaction--are introduced and their relationship to the occupational structure is described. The study also covers occupational role stresses, several theories of occupational ranking, and the dynamics of occupational behavior. Finally, a methodological framework is suggested for research in occupations using the role theory approach, including attention to data-collection methods, interviewing, sampling, questionnaires, and analysis. (Author)

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THE STRUCTURE OF OCCUPATIONS:

A ROLE THEORY APPROACH

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FORWARD

The preparation of the monograph entitled "The Structure of Occupations: A Role Theory Approach" is the second project of the Center for Occupational Education in which Dr. Frederick L. Bates has participated. Earlier, in 1966, Dr. Bates presented a paper at the Regional Seminar for State Leaders in Vocational Education on In-Service Education which was held at Atlanta, Georgia, May 18-20, 1966. The present monograph is an elaboration of concepts presented at the Georgia seminar.

This monograph is illustrative of the research development program of the Center. The interest is to produce and disseminate a basic framework which may be useful in stimulating research and related activity toward the general problem or topic. To effect this interest, the Center convened a seminar which included occupational education researchers and sociologists to explore the research and development potentialities and implications of an earlier draft of Dr. Bates's monograph. The proceedings of the seminar served as an input into the revision of the manuscript. The monograph now is being distrubuted by the Center as a resource for further work in the problem ✓ of determining the extent to which the role held by incumbents in an occupation should be incorporated into the curriculum to prepare persons for the occupation.

The manuscript for the monograph has been reviewed by a review panel whose members include Dr. Robert J. Dolan, Professor of Adult Education and Sociology and Anthropology; Dr. Charles V. Mercer, Associate Professor of Sociology and Coordinator of Research, Center for Occupational Education; Dr. Selz C. Mayo, Professor and Head, Department of Sociology and Anthropology; all of North Carolina State University at Raleigh; and Dr. James E. Wall, Educationist and Director, Mississippi Research Coordinating Unit for Vocational-Technical Education, Social Science Research Center, Mississippi State University. The manuscript was edited by Mrs. Julie McVay, Grant Research Assistant, and Mr. J. K. Dane, Staff Editor, Center for Occupational Education. Special assistance in preparing the manuscript was provided by Mrs. Sylvia Ray, Mrs. Nan Adams, and Mr. William Ballenger of the Center for Occupational Education. The Center acknowledges the contribution of these persons. In addition, the Center acknowledges the assistance of Dr. Charles H. Rogers, Coordinator of Services and Conferences, Center for Occupational Education, and Dr. C. Douglas Bryant, Assistant Professor of Agricultural Education, North Carolina State University at Raleigh, in coordinating the project and the seminar.

The Center is indeed grateful to the author of the manuscript for sharing his insights into an avenue of research and development in occupational education with researchers in occupational education and related fields throughout the nation.

John K. Coster, Director
Center for Occupational Education

PREFACE

This monograph applies ideas from the field of "role theory" to the study of occupations. Since the version of this theory used in the monograph is quite different from more traditional approaches to this subject, it will be useful to the reader to be able to place it in a historical perspective.

Although he was preceded by such theorists as George H. Meade and Charles Horton Cooley in the use of the role concept, Ralph Linton is usually credited with having given the concepts of status, role, and position their greatest popularity in the various social sciences. Linton defined position and role as complementary concepts and regarded role as the set of expectations prescribing the behavior appropriate to a position occupant. To Linton, there was one role for every position. Some confusion arose out of Linton's work because his particular wording led to the possible interpretation that role consisted of actual rather than expected behavior. It is clear in The Cultural Background of Personality that this was not the case.[1] Two distinct streams of definitional traditions developed from interpretations of Linton's meaning in The Study of Man.[2] One group of sociologists defined role as expectation while the other defined role as behavior. Both groups, however, continued to follow the practice of correlating role with position or status and continued with the formula of one role with each position. A number of scholars began to perceive two facts concerning the conceptions of position, status and role as given by Linton and his followers. First, given the "one role, one position" formula, it was impossible to deal with more than a dyad at any given time. Thus, parent-child or teacher-pupil or merchant-customer relations could be discussed using role theory; however, more complex relationship systems were ruled out. Second, if position and role were defined as Linton specified, role and position or status became almost synonymous with each other and only one concept was actually needed. If role were defined as expected behavior, then position became sheer location in social space and since no one could define the properties of social space, except through defining role relations, the concept of position lost almost all of its meaning. If role were defined as behavior, then as esoteric sleight-of-hand was being perpetuated since the word behavior would serve perfectly well to refer to behavior.

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[1] Ralph Linton, The Cultural Background of Personality, New York: D. Appleton Century Company, 1945.

[2] Ralph Linton, The Study of Man, New York: D. Appleton Century Company, 1936.

There began to appear mutant varieties of role theory as these conceptual inadequacies became apparent. The first of these was in E. T. Hiller's Social Relations and Structures, where Hiller abandoned the concept of role altogether and used the concepts of position and status to mean a set of expectations located at a point in social space.[3] Hiller apparently felt that only one concept was needed because location could be specified by coordinates and need not be given a special conceptual designation apart from the idea of the expectations positioned at that location. This is especially interesting in view of the fact that in his introductory textbook, written in the late 1920's, Hiller used the concepts of status and role in almost exactly the same way as Linton.[4]

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[3] E. T. Hiller, Social Relations and Structures, New York: Harper and Brothers, 1947.

Florian Znaniecki chose the opposite solution to Hiller and abandoned the concepts of position and status in favor of the exclusive use of role. This is seen in the posthumous volume Social Relations and Social Roles.[5] To complete the circle, Charles P. Loomis in Social Systems hyphenated the concepts to become status-roles.[6] The difficulty with these solutions was that they solved the second problem mentioned above, but not the first. Given the Hiller, Znaniecki, and Loomis solutions, we are still unable, using role theory concepts, to deal with more than a dyad. It was in response to this first problem that the "multiple role conception" emerged. It became apparent to this writer that, by conceiving of several roles associated with a single position, we would be able to deal with complex group structures. The arguments in favor of this conception were presented in two articles published in Social Forces. The first, entitled "Position, Status and Role" appeared in

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[4] E. T. Hiller, Principles of Sociology, New York: Harper and Brothers, 1933.

[5] Florian Znaniecki, Social Relations and Social Roles, San Francisco: Chandler Publishing Company, 1965.

[6] Charles P. Loomis, Social Systems, Princeton, New Jersey: D. Van Nostrand Company, Inc., 1960.

1956 and outlined the deficiencies in role theory listed above.[7] The second was entitled "A Conceptual Analysis of Group Structure" (1956) and presented the application of these ideas to group structures more complex than dyads.[8]

The same solution apparently occurred almost simultaneously to Neal Gross and Robert K. Merton. In 1958, Gross and his associates published Explorations in Role Analysis.[9] This book contained a multiple role conception similar in many respects to the one mentioned above. A year earlier, Merton's revised edition of Social Theory and Social Structure had appeared.[10] In this volume, Merton outlined his "role-set" ideas and elaborated these interms of such additional concepts as "status-sets" and "status-sequences." Although there are a number of striking differences between the Gross, Merton and Bates versions of "multiple role theory," they have several things in common. First, they recognize that a person may perform a "set of roles" as the occupant of a single position; and, second, all recognize the fact that a single individual occupies multiple positions in society. By so doing, they provide an avenue through which complex systems of relationships can be analyzed, and for this reason the "multiple role theory approach" was chosen for application to the study of occupations.

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[7] F. L. Bates, "Position Status and Role: A Reformulation of Concepts," Social Forces, Vol. 34, No. 4, May 1956.

[8] F. L. Bates, "A Conceptual Analysis of Group Structure," Social Forces, Vol. 36, No. 2, December 1957.

[9] Neal Gross, Ward S. Mason and Alexander W. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role, New York: John Wiley and Sons, Inc., 1958.

[10] Robert K. Merton, Social Theory and Social Structure, (Revised), New York: The Free Press, 1957.

This monograph is an attempt to apply my own theories concerning role to the field of occupations. I am indebted to a large number of people some of whom are teachers, personal friends, colleagues and former students, others of whom are scholars living and dead upon whose published work I have drawn heavily to build my own version of "role theory."

In this latter category, I owe particular thanks to Talcott Parsons and Robert K. Merton from whose writings on functional analysis, under the guidance of Nicholas J. Demerath, I learned about social systems and about the functional form of analysis. I am indebted to Harold L. Geisert and John Gillen, both former teachers, for their interest in status and role and to Ralph Linton and E. T. Hiller whose writings first aroused this interest.

In preparation of this manuscript I am particularly in debt to Harold L. Nix who encouraged me to write it, assisted in developing some of the ideas, and made many suggestions as to content. Thanks are due to Alvin L. Bertrand, Selz C. Mayo and Albeno P. Garbin who reviewed and criticized the manuscript. H. Max Miller, who as a student at North Carolina State University some thirteen years ago saw the ideas of the writer begin to take shape and helped prepare the figures for the 1956 article, rendered invaluable assistance by aiding in the editing and revision of this manuscript into its present form.

The author is especially indebted to the Center for Occupational Education at North Carolina State University and to Charles Rogers,

Douglas Bryant and John Coster for their encouragement and sponsorship of this project and for assembling a distinguished group of occupational researchers to review and criticize it.

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CHAPTER I

OCCUPATIONS IN RELATION TO THE WORLD OF WORK

Objectives

This monograph has two objectives: to supply a conceptual framework for studying occupations; and to furnish a methodological guide for employing those concepts in research activity. Where possible, these two objectives will be pursued simultaneously; therefore, as concepts are introduced and discussed, notes on data collection and methodology will be given. A more detailed statement of methodological problems associated with the study of occupations will be given in a final chapter after the conceptual scheme has been presented in detail.

The general theoretical point of view towards occupations to be followed in this manuscript is that of role theory. By employing concepts associated with role theory, occupations will be defined and their structure analyzed conceptually. Before proceeding to the task of outlining pertinent role concepts, however, it is necessary to discuss briefly certain broader problems associated with the study of occupations. Two questions in particular need preliminary answers. First, the question of how occupations are differentiated from nonoccupational work activity needs to be discussed. Secondly, an answer needs to be supplied to the question of how occupations are differentiated from jobs in work organizations. Preliminary answers to these two questions will be supplied in the following paragraphs.

Occupations and Nonoccupations

Webster's Unabridged Dictionary has the following to say about the word "occupation": "An occupation is that which occupies or engages the time and the attention; the principal business of one's life; vocation; business. . . . One's occupation is that to which one's time is devoted or in which one is regularly or habitually engaged; employment, which is often interchangeable with occupation, may also suggest what one does in another's service."

As is obvious from Webster's definition, the word "occupation" denotes employment or work and refers to an individual's principal commitment of time and energy in the world of work. A major problem which arises in dealing with the concept of occupation is that of differentiating occupations from other activities to which human beings commit their time and energy.

One possible solution is to classify human activity into work and leisure activity and then to confine the concept of occupation to the world of work. There are certain obvious difficulties involved here. It is difficult to differentiate between work activity and leisure activity at all times because work and play activity assume a great variety of forms. Human behavior in a given society contains infinite gradations of activity from obvious recreation or play to obvious physical drudgery or work. Similarly, it is infinitely graded from obvious kinship-oriented behavior which does not involve work activity to obvious economic activity in work groups and organizations. In every institutional realm such as politics, religion, kinship, education, and economics, human behavior shades off from work activity or what might be called occupational behavior to nonwork or nonoccupational activities.

Given these facts, the definition of occupation as a concept based on the difference between work and play or leisure can only supply an arbitrary means of differentiating between occupations and nonoccupations. Since the definition must finally rest on an arbitrary solution, it seems reasonable that the solution chosen should facilitate the gathering of occupational data and its analysis, rather than hinder it. The choice to be made here in differentiating occupations from nonoccupations will be purely arbitrary, and will be made to allow us to proceed with the work of studying and understanding occupations. It is intended to allow us to rule out the need to consider many types of human activity which are of importance and significance to society but which might, at this early stage in the development of our knowledge of occupations, divert our attention from the central problems involved in this field. It is also meant to rule out the need to consider all work activity performed by human beings in favor of considering only those "full-time callings or trades and professions" to which human beings devote a major part of their time in obtaining an income to be used in exchange for the various necessities of life.

In this manuscript, an occupation will refer to a cluster of human activities which produce some goods or services that are exchanged for other goods or services or for money. Work activity performed for self-consumption or for the direct benefit of household or family members will not be considered an occupation. In other words, the housewife's duties as a member of the family in cooking, cleaning, washing clothes, and carrying on other productive work activity within the family will not, under this definition, be considered an occupation. In a primitive society lacking barter or exchange of goods in return for work activity, there would be no occupations according to this definition. The primitive hunter or fisherman or the subsistence farmer who hunts, fishes, or farms in order to provide direct subsistence for his kin group would not, under this definition, have an occupation. Consequently, work activities for which an individual does not receive a wage, salary, or fee will not be considered occupational activities.

Given this definition, it is obvious that occupations can exist only in a social system which has a modicum of social differentiation built into its structure. For an occupation to emerge within the structure of society, it is necessary for individuals to specialize in certain work activities for which they receive an income that can then be spent in exchange for the products of the work activities of others. Under this definition, the full-time commitment of individuals to certain activities in modern societies that are highly differentiated would be ruled out for consideration as occupations. For example, the full-time student and housewife are excluded.

Occupations and Jobs

To say that an occupation is a cluster of behaviors which produces some goods or service for which an individual receives an income in the form of a wage, salary, or fee, moves us closer to differentiating occupations from nonoccupations. However, the concept of "occupation" as it appears in the literature of sociology and in the speech patterns within the society implies more than this. It implies, for example, that the cluster of behavior making up the occupation has a more or less identifiable, "traditional" content. If a man says he is a baker or a blacksmith or a doctor or a bus driver, he is designating a set of activities or behaviors that "traditionally" form a given occupation. This cluster of behaviors is typical of a number of people within the society and describes the customary way in which a given product or service is produced.

In a complex society such as ours most products or services are produced in work groups or large-scale work organizations. In this monograph, we will take the point of view that a job is a concept referring to an occupation as it is built into the structure of a given work group or organization. Thus, the jobs of secretaries in groups and organizations, when viewed as a whole, become the occupation of "secretary"; or the jobs of bakers in many bakeries, taken together, become the occupation of "baker." Given this point of view, it is obvious that jobs also consist of clusters of behavior which produce some product, good, or service, or contribute to the production of one, and that individuals performing the behavior receive pay for it. The job, in other words, is a position or cluster of positions in a group or organizational structure. It is a category appropriate for analyzing work systems or work groups. The term occupation is a person-centered concept and will be used to refer to a cluster of behaviors characteristic of an individual or class of individuals who hold certain jobs. It is appropriate for analyzing the relationship of a person to the world of work, rather than for analyzing the structure of work groups and organizations. Persons have occupations; work groups contain jobs.

In both cases we are faced with the analytical possibility of generalizing from a number of individual cases to a class of cases. In other words, if we were to examine a number of people who produced the same product or service and generalized about the nature of the behavior of these individuals, we would be able to make a statement about an occupational category. Thus, we could examine a number of individuals who are secretaries and refer to the occupation of secretaries in general rather than that of a given secretary. Similarly, we could examine a number of work organizations and select from them jobs in terms of the product produced by the activity incorporated within the job and then generalize to the class or category of jobs. Thus, we could examine secretarial jobs in a large number of work organizations and refer to the job of the secretary. If these two procedures were followed and the description of the occupation of secretary and the job of secretary were done with extreme care and accuracy, it would appear at first glance that the two descriptions would be identical. However, this would not be true. In examining the occupations of secretaries, one would ultimately have to come to grips with the career pattern problem and problems of socialization of the individual. He would not necessarily encounter these problems in studying jobs in organizations.

For purposes of this monograph, only those human activities for which individuals receive pay in one form or another will be considered to be occupations. In the discussion that follows, a careful attempt will be made to maintain analytical distinctions between the occupation as a concept appropriate to analyzing the behavior of individuals and the job as a concept appropriate to analyzing the structure of work organizations.

Person-Centered Versus Group-Centered Analysis of the World of Work

In attempting to apply role theory to the study of occupations, it is necessary to distinguish clearly between two forms of analysis in which the concept of role is commonly employed. These two forms have been introduced briefly in the paragraphs above. They consist of person-centered analysis and social systems-centered analysis. In person-centered analysis, the concepts of role theory are used to deal with the relationship of the individual to the social system in which he participates. The analytical problem is to treat the individual as a total system and to supply a means of viewing his participation in group, organizational, communal, and societal activities. In the case of social system analysis, the problem is different. Attention here is focused on the functioning of groups and complex systems. The focus is not upon the individual but on the group, organization or society as a total system. In such analysis, the individual becomes an actor in the system rather than a system to be analyzed in and of itself. Person-centered analysis is essentially social-psychological and the problem is to see the individual as a system of behavior which persists through time and space, having its own unity and internal processes. In the case of social system analysis, the group or the system itself is the unit of analysis and the problem is to see this system as a total functioning entity which persists through time and space.

In occupational research, either of these two forms of analysis can be employed. Focus can be directed toward the individual practitioner of an occupation and toward the systems of activities and behaviors in which he engages as a member of an occupation. In this case, person-centered analysis would be employed. Group-centered analysis involves looking at the work group or the work organization as a system and seeing the way in which it produces its product or performs its service.

Person-centered and group-centered analysis are two sides of the same coin, the difference between them being a matter of focus. Similarly, occupational analysis and the analysis of work organizations using the concept of jobs are two sides of the same coin. In most cases, it is impossible to visualize occupations as existing without the existence of jobs in work groups and organizations. Similarly, to visualize the functioning of work groups and organizations, it is necessary to have a concept such as that of occupation.

One other thing should be noted about the relationship between the concepts of job and occupation. Many jobs in work groups and organizations are not associated with identifiable occupations. They are unique to the particular organization of which they are a part and involve a set of behavior found only in that particular organization. This is particularly characteristic of work organizations in advanced technological societies where jobs evolve to meet the needs of a particular production situation. As a consequence, there does not exist within the society a category of people who share a common occupation with respect to these jobs. Because of this, it is reasonable to say that the study of jobs in an industrial society is more general than the study of occupations. The word occupation refers only to certain types of jobs, namely, those which have occupants with identifiable traditional work patterns.

The term occupation has been defined above in terms of a set of behaviors through which a given product or service is produced. In another sense, an occupation implies a set of skills or a set of learned behavior patterns which have been incorporated into the personality of a given individual. In this sense, an occupation represents a system of latent or potential behavior. An individual with a given occupation is presumed to know the behavior necessary for performing certain kinds of work activities. Such learned skills or potential work behavior normally are transferable from one work group setting to another. Thus, a person who is a plumber, a welder, or a machinist, is a person who has learned the behavior necessary to perform certain kinds of activities within a work group setting and is able to perform these activities in many group and organizational contexts. Particular jobs may call for only part of the skills and learned behavior patterns implied by the occupation. Indeed, a person may have an occupation without having a job! This is true of the unemployed, the retired, and, to some extent, the novice.

CHAPTER II

ROLE THEORY CONCEPTS AND THEIR APPLICATION TO OCCUPATIONS

In the preceding paragraphs, occupations have been defined as clusters of human behaviors that produce some product or service in return for which an actor receives remuneration. Starting from this definition, it is possible to define an occupation as a cluster of roles performed by a given individual in return for pay. If the term role is introduced in defining occupations, it becomes possible to apply various useful concepts in the field of role theory to the analysis of problems within the study of occupations. In the following paragraphs, the basic concepts needed to apply role theory to the study of occupations will be outlined by presenting a progression of concepts from the microscopic to the macroscopic level of human behavior. This will be done in such a way as to maintain a clear distinction between person-centered analysis and social system or group-centered analysis.

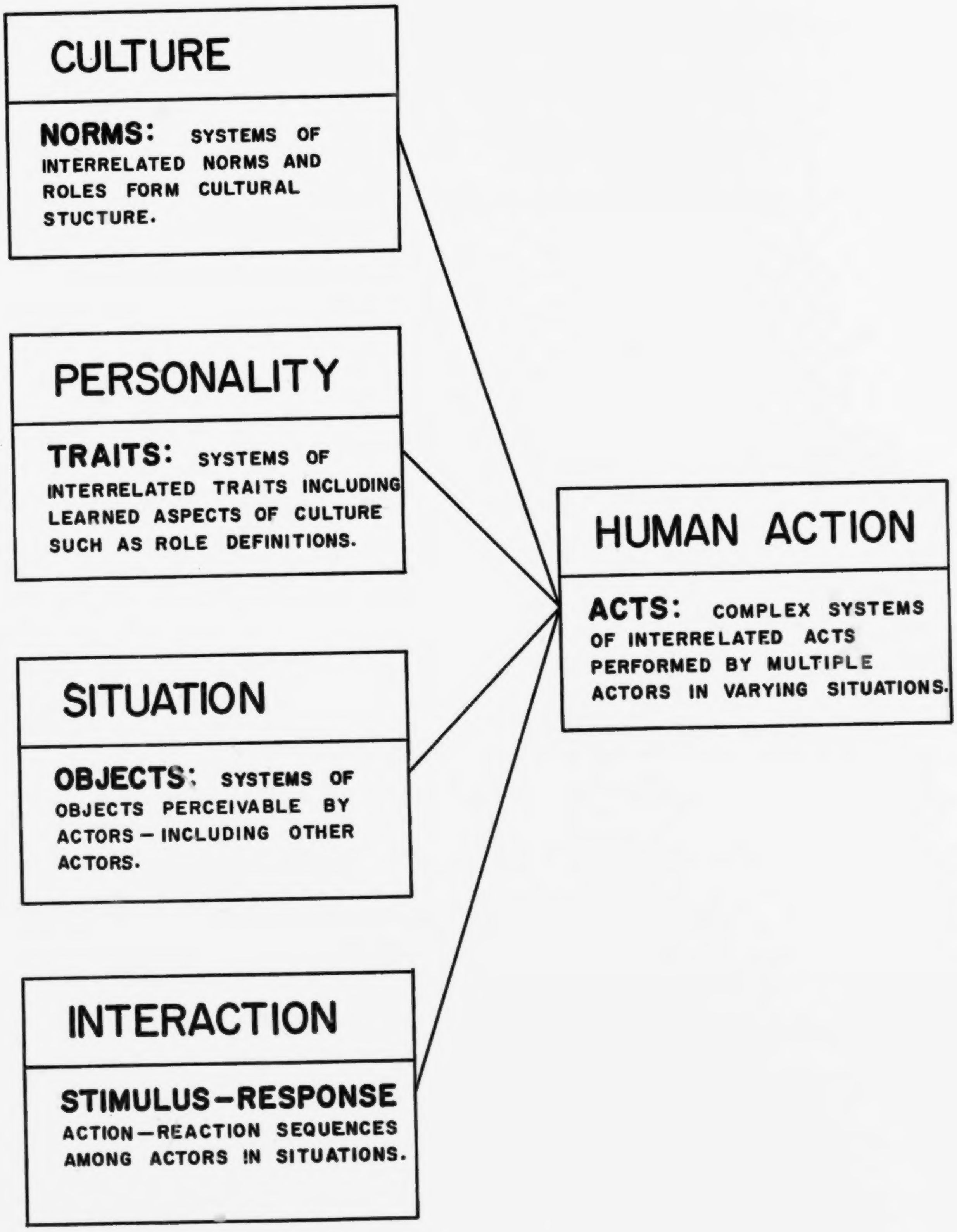
General Frame of Reference

Before role theory can be applied adequately to the analysis of occupations, it is necessary to assume a theoretical position toward human behavior in general. The theoretical position to be taken here begins with the assumption that human behavior, and therefore, occupational behavior is a dependent variable toward which sociological and social-psychological analysis is directed. In other words, sociology and social psychology attempt, through the formulation of theories and conceptual schemes, to derive and test hypotheses concerning the causation of human behavior.

Social science attempts to explain human behavior in terms of a set of independent or causative variables which, in interaction with one another, may be seen as the causes of behavior observed in human beings. At the present time, social scientists agree upon at least four major groups of independent variables as being important in explaining human behavior. They are, (as shown in Figure 1): (1) the cultural or cultural structure variable, (2) the personality variable, (3) the situational variable and (4) the social interaction variable.

This diagram shows that if we were to attempt to explain a given human act, for example a secretary answering the telephone when it rings, we would have to take into account the several independent or causative influences on the behavior. First, it would be necessary to take into account both the cultural variable which defines the ringing of the bell as a signal to answer the phone and the cultural expectation that a secretary in an office will answer it. The way in which she answers the telephone, her tone of voice, the speed with which it is done, the attitude assumed in the answering; in other words, individual variations in the telephone answering behavior of many secretaries can then be explained only by introducing the second, or personality variable. This variable brings into the analysis individual differences among actors in social situations and takes into account variation in their personal traits and backgrounds. It allows us to account for variation in the way cultural norms are viewed or culturally prescribed behavior patterns

MODEL OF BEHAVIOR CAUSATION



CULTURE

NORMS: SYSTEMS OF INTERRELATED NORMS AND ROLES FORM CULTURAL STUCTURE.

PERSONALITY

TRAITS: SYSTEMS OF INTERRELATED TRAITS INCLUDING LEARNED ASPECTS OF CULTURE SUCH AS ROLE DEFINITIONS.

SITUATION

OBJECTS: SYSTEMS OF OBJECTS PERCEIVABLE BY ACTORS — INCLUDING OTHER ACTORS.

INTERACTION

STIMULUS-RESPONSE ACTION—REACTION SEQUENCES AMONG ACTORS IN SITUATIONS.

HUMAN ACTION

ACTS: COMPLEX SYSTEMS OF INTERRELATED ACTS PERFORMED BY MULTIPLE ACTORS IN VARYING SITUATIONS.

FIGURE I

are performed by various members of the same society. A third variable that must be introduced to explain behavior is the situational variable. Simply put, a secretary cannot, or will not, answer a telephone unless she is able to hear the bell ring, and the telephone is present within the situation. Situational variables must be taken into account in explaining individual actions or systems of actions on the part of human beings. Finally, human behavior almost always takes place in groups and involves interaction among human beings. What takes place in the telephone conversation that follows the answering by the secretary is interaction between her and the person calling. Although norms shape the appropriate responses called for and although the situation and personalities of the individuals involved have influence on the behavior performed, the course of action which takes place must be viewed as the result of interaction among the people involved within the context of the culturally-defined situation. Therefore, social interaction must be introduced as a variable in explaining human behavior. Since occupational behavior is one type of human behavior we will have to take into account these four variables if we are to explain occupations (See Figure 1).

In order to apply this system to the study of occupations utilizing concepts of role theory, it is necessary to identify, at the outset, the units of human behavior which will be analyzed, and to identify the units which apply to the four independent variables. Let us begin by assuming that the individual act is the unit of which human behavior as a system is comprised. Thus, human behavior consists of a collection or system of acts. Acts are real behavior performed by real people in real situations and normally involve social interaction.

It is impossible to define exactly the size and form of acts as behavioral units. At present, we can only say that an act consists of a behavior which is considered to be a completed performance that has meaning to the actor performing it. A man shaving performs an act, which includes various sub-behaviours, such as, soaping the face, scraping off the whiskers, removing the soap, and so forth. Similarly, answering the telephone would be considered an act which involves reaching for the phone, picking it up, and saying a word such as "hello." In other words, an act has no pre-determined size or complexity but must be defined in terms of the completion of an activity on the part of a given person in a social situation. It must also be performable independently of other acts which occur at different times and in different situational contexts.

The units of which the cultural structure variable is comprised are norms. The total culture of a society consists of a very large and interrelated collection of norms. A norm is the notion that a certain kind of behavior is called for or expected in a given social situation. Basically, there are three types of norms that can be identified. One type calls for muscular or overt action and can be labeled "behavioral norms." The second type calls for emotional responses and specifies how and when a person is expected to feel about some external object, person, or behavior. This type can be labeled an "emotional norm" and on occasion takes the form of a social value. The third type of norm calls for a given kind of thought pattern or belief on the part of the individual, or for the possession of certain information. It is a form of mental behavior. These can be labeled "thought norms" or "cognitive norms." In other words, culture contains a set of ideas about how people ought to behave, feel, and think in social situations.[1]

Personality, for purposes of this analysis, consists of traits which form systems of qualities that are interrelated in a dynamic way. Some of these traits are biological in nature. Others are psychological in nature, and still others are sociological or cultural. The individual personality may be seen as possessing a number of traits, some of which involve the previous learning of the culture of the society and the values, beliefs, attitudes, and norms which form a part of the cultural system of that society.

Situation, for purposes of this analysis, consists of all those objects in the environment that the actor perceives.[2] The objects in the actor's situation may be natural objects, culturally structured objects, or other human beings. Therefore, the situation for the actor consists of all of those things and events external to self that are perceived by him, whether these objects are other human beings, cultural items, such as desks, telephones, machines, and buildings, or parts of nature, such as animals, trees, flowers, plants, mountains, streams, and so forth. The situation has both a time and space location in which the objects exist and are perceived by actors.

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[1] Talcott Parsons and Edward A. Shils, Toward a General Theory of Action, Cambridge: Harvard University Press, 1951, pp. 4-6.

[2] Kurt Lewin, Field Theory in Social Science, New York: Harper and Brothers, 1951, pp. 238-304.

Interaction as a variable has as its basic particle the stimulus response unit. In other words, interaction in its smallest form consists of a stimulus behavior on the part of one actor to which another actor responds. Interaction, like personality and situation, is shaped by the culture. Cultural norms call for behavior that acts as a stimulus and defines appropriate responses. Similarly, in interaction the personality of individuals comes into play and part of the stimulus and response must be accounted for in terms of the impact of one personality upon another. Different circumstances or situations also affect interaction.[3]

These four variables, taken together, will be regarded as a system of interacting variables which are arbitrarily designated as independent for purposes of this analysis. Each one, for other purposes, could be considered a dependent variable. For example, personality as a dependent variable must be regarded as among other things a result of culture, situation, and interaction.

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[3] Talcott Parsons, The Social System, Glencoe, Illinois: The Free Press, 1951, pp. 3-23. (Parsons identifies three systems which contribute to action as the dependent variable: social systems, personality systems and cultural systems. He sees these functioning in a situational content.)

Pitirim A. Sorokin, Society, Culture, and Personality, New York: Harper and Brothers, 1947, pp. 63-64. (Sorokin deals with society, culture, and personality as major variables effecting human behavior.)

Raymond Firth, Elements of Social Organization, Boston: Beacon Press, 1951, pp. 30-40. (The distinction between socio-cultural structure and social organization used in this monograph is based on Firth's ideas.)

George Homans, The Human Group, New York: Harcourt Brace and World, pp. 32-40. (Homans identifies activity, interaction and sentiment as major variables for use in analyzing group behavior. Later he introduces norms as a factor. There are some rough similarities between the Homans approach and that used in this monograph if one remains at a small group level of analysis.)

(The four variable scheme used here is a blend of the approaches of the four people mentioned above.)

Role Theory Concepts

Roles

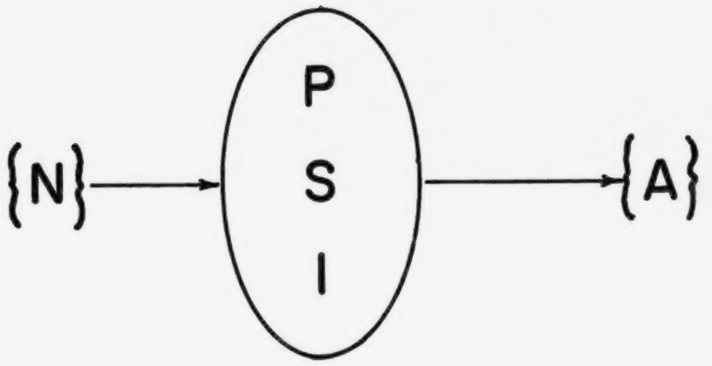
Let us now return to the concepts of role and occupation. We said earlier that an occupation may be regarded as a system of roles performed by an actor for pay. Roles need to be defined in two ways: in terms of ideal behavior or cultural structure, and in terms of real behavior or actual performance. A role as ideal behavior consists of a set of norms and is therefore a part of culture. As real behavior, it consists of a set of acts. An occupation as ideal behavior consists of a set of norms and is an element in culture. As real behavior, an occupation consists of a set of acts that are a product of culturally defined roles, personality, situational and interactional factors.

In one sense then, an occupation is a cluster of norms that defines the kind of behavior expected of, or appropriate to, a person with a given kind of job. In a second sense, an occupation may be defined as a set of behaviors performed by practitioners in work situations. In order to study the impact of the ideal structure of a role or an occupation on the real structure of a role or an occupation, it is necessary to keep in mind the theory of human behavior outlined above and to make a basic, theoretical assumption. This assumption may be stated as follows: an act may be viewed as a product of a norm, if we hold constant the variables of personality, situation, and interaction. In other words, a norm may be said to lead to behavior if the proper traits of personality are present, if the proper objects are present in the situation, and if the stimulus response sequence necessary to support the norm is present. This theory is diagrammed in Figure 2, and may be read as "norms lead to acts if personality, situation, and interaction are held constant."

We have said that roles consist of clusters of norms in the sense of ideal roles and clusters of acts in the sense of real behavior. Before we can analyze the relationship between norms and acts, it is necessary to have some way of knowing when a given set of actions is related to a given set of norms. To do this, the idea of function is introduced. A function, for present purposes, may be defined as the consequence or outcome of a set of behaviors for the social system in which the behavior is lodged. In one sense of the word, a function designates the desired end-product of a set of behavior. We could, for example, refer to welding as a function. In this sense, welding is the joining of two pieces of metal by melting the metal to create a seam. A set of behavior, called welding behavior, produces the finished seam.

Using the concept of function, it is possible to define the structure of a role as a cluster of norms organized around a function that one person performs with respect to another person or object in a given social situation. Role behavior, then, would consist of a set

NORM-ACT RELATIONSHIP



N—NORM

A—ACT

P—PERSONALITY

S—SITUATION

I—INTERACTION

MEANING: NORMS LEAD TO ACTS GIVEN APPROPRIATE PERSONALITY, SITUATIONAL AND INTERACTIONAL COMPONENTS.

FIGURE 2

of actions organized around the performance of a given function in a given social situation.[4]

Using the idea of function, we can relate the norms that exist within the role structure of the society to the behavior which performs the same function. For example, we can examine the norms and compare these to the acts involved in the actual process of welding. In so doing, we can still work within the framework of the theory presented in Figure 2, but we can now translate it into the form shown in Figure 3. In this way, we can say that the normative structure of the role results in structured behavior in the form of acts, if we hold constant the intervening variables of personality, situation, and interaction.

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[4] "Role Theory," has multiple origins as a conceptual scheme. Most modern conceptions owe a good deal to the thoughts of Cooley and Mead for ideas about the relationship of roles to personality and to behavior and to Ralph Linton for the relationship of the role-status-position ideas to culture on the one hand and social organization on the other. Linton's few phrases in the Study of Man have had a major impact on later formulations and because of ambiguity in language have resulted in a wide variety of interpretations and definitions. Role Theory in its newest and most complex form can best be seen in the work of Merton on "role sets," Gross, in Explorations in Role Analysis and in various articles by the author of this monograph. The Merton, Gross, Bates conceptions bare the common characteristics of recognizing multiple roles assigned to a given person as a member of a single group. The multiple role approach represents a conceptional break-through which allows the treatment of large complex human groupings. The Linton-like conception leads the analyst to dealing with a dyad. Using the Linton approach, anything more complex has to be analyzed as a system comprised of dyads. The following are a few key references on role theory:

Linton, Ralph, The Study of Man, D. Appleton Century Company, New York, 1936, pp. 113-131.
Linton, Ralph, The Cultural Background of Personality, D. Appleton-Century Company, New York, 1945, pp. 77-82.
Merton, Robert K., Social Theory and Social Structure, Revised, The Free Press, New York, 1957, pp. 368-384.
Gross, Neal, Ward S. Mason and Alexander W. McEachern, Explorations in Role Analysis, John Wiley and Sons, Inc., New York, 1958, pp. 11-70.
Biddle, Bruce J., and Edwin J. Thomas, Role Theory, John Wiley and Sons, Inc., New York, 1966, pp. 23-32.
Nadel, S. F., The Theory of Social Structure, Cohen and West, Ltd., London, 1957, pp. 23-32.
Bates, Frederick L., "Position Role and Status, A Reformulation of Concepts," Social Forces, Vol. 34, (May, 1953), pp. 313-321.

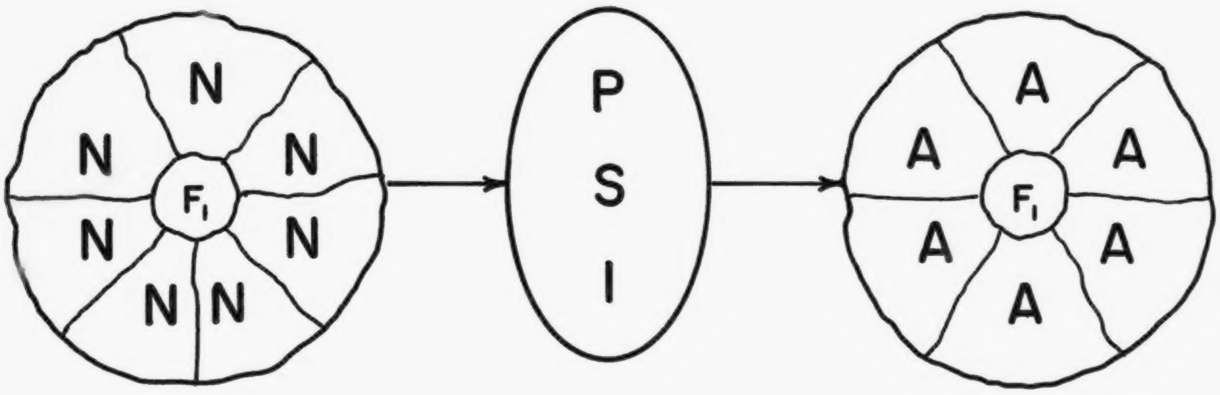
The norms that form the role structure represent a kind of "blueprint" for performing a given function. Role behavior, on the other hand, consists of real actions which may conform, more or less, to the "blueprint" supplied by the role structure. By introducing the idea of function into the conceptual scheme, we are permitted to move back and forth between real behavior, which performs a given function, and ideal behavior which offers a cultural blueprint for performing the same function.

To simplify exposition, in the following paragraphs we will discuss only the ideal structure of roles and systems comprised of roles. It will be understood, however, that at every point along the way the same kind of parallel can be drawn between ideal behavior and real behavior, that has been drawn at the level of the individual act and norm on the one hand, and role structure and role behavior on the other.

Positions

In most group situations a given individual performs a number of functions and therefore may be said to have a number of roles assigned to him. For this reason, we need a concept which permits us to talk about the individual's place in the structure of a single group. The term generally used by sociologists to do this is social position.

ROLE AND ROLE BEHAVIOR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DEFINITION: A ROLE CONSISTS OF AN INTERRELATED SET OF NORMS ORGANIZED AROUND A FUNCTION PERFORMED BY ONE ACTOR TOWARD ANOTHER.

FIGURE 3

A social position consists of a set of roles assigned to the same person for performance in a given group situation. In the structure of a given group, there is one position for each member of the group. Depending upon the type of group involved, several individuals may occupy positions with identical structures. Nevertheless, it is assumed that for every person who is a member of a group there exists one, and only one, position in the structure of the group. It is further assumed that each position consists of a cluster or system of roles assigned to one person for performance in a particular group. Figure 4 shows the relationship between the concepts of position and role. The elliptical figure represents the social position of a person in a group structure. The large segments within the ellipse represent roles, and ~~the~~ smaller segments represent norms organized around different functions performed by the same person in the same group. To illustrate this conceptual scheme in terms of an occupation, let us think of the position of a secretary in an office group.

The secretary in this example occupies a position in a two-person group consisting of herself and her boss. This position consists of a number of roles, one role for each different function she performs in the structure of the group. The question of which roles exist within the secretary's position then becomes one of what different functions she performs and what clusters of norms or behavior expectations exist around these functions. Let us assume that this particular secretary has the following functions assigned to her: (1) typist, (2) stenographer, (3) file clerk, (4) bookkeeper, (5) receptionist, (6) telephone operator,

SECRETARY POSITION

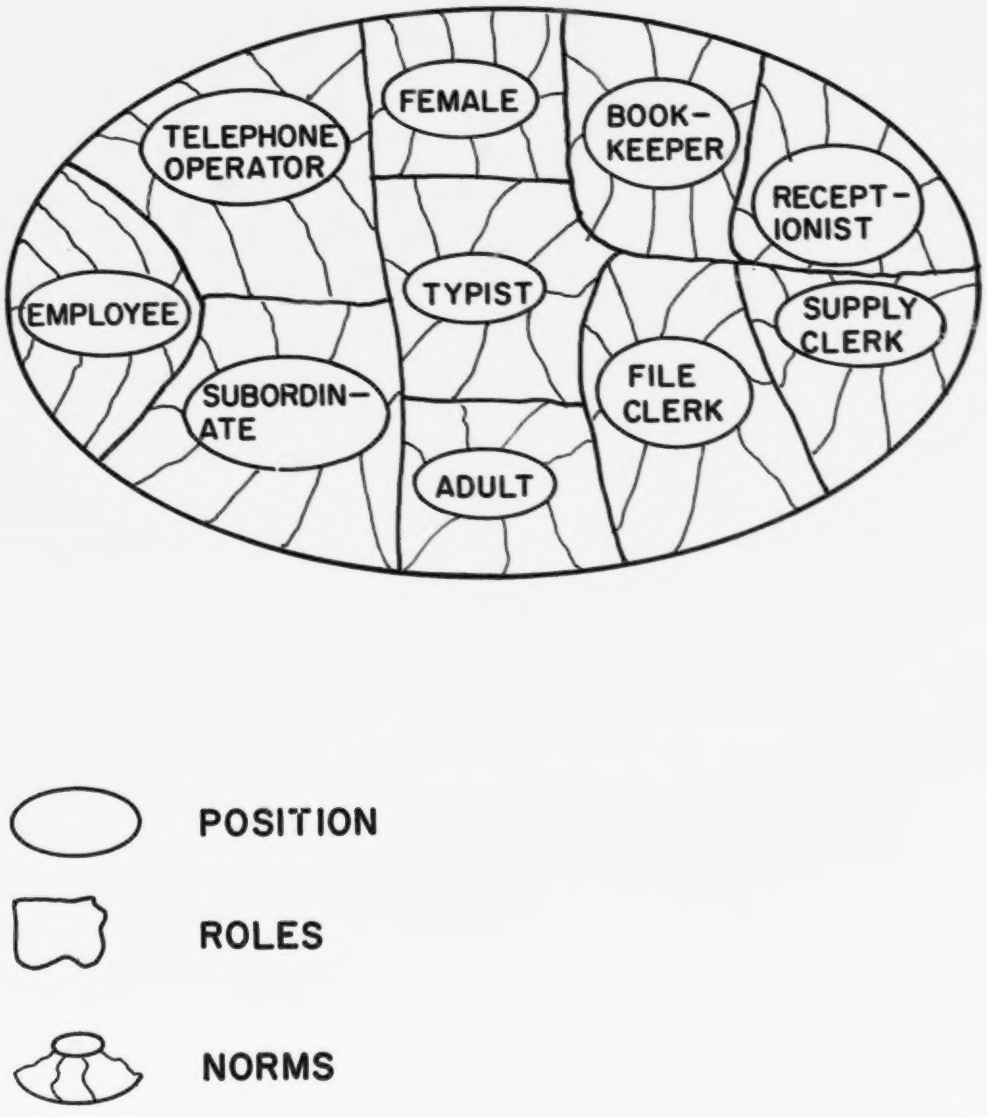
FEMALE
TELEPHONE OPERATOR
BOOK-KEEPER
RECEPT-IONIST
EMPLOYEE
TYPIST
SUPPLY CLERK
FILE CLERK
SUBORDIN-ATE
ADULT
POSITION
ROLES
NORMS

FIGURE 4

(7) supply clerk, (8) subordinate and (9) employee. According to our definitions, each one of these functions would have a number of norms organized around it that specify types of behavior which, when performed, will result in the function being produced. Thus, the function of typist has a number of behavior expectations clustered around it that are learned by the secretary and specify how to perform the function of typing. The typist role, then, consists of a cluster of norms which call for a rather complex set of behaviors involving the use of machines and other paraphernalia. It also specifies certain prescribed forms for putting things on paper, such as letters, outlines and documents.

The stenographer function consists of taking shorthand notes for transcription. It also involves a complex set of behaviors organized around getting a function performed. Similar statements can be made about each of the remaining roles listed. Each role has a set of behavior expectations organized around it that define the kind of actions appropriate to performing the function. The roles consist of behavior expectations held by the secretary toward herself, by her boss, and by other members of the society who are familiar with the occupation of secretary.

A word needs to be said about two of the roles included in the list. The role of subordinate consists of behavior expected with respect to the boss in the process of giving and receiving instructions, orders, directions, and so forth. There are norms that tell the secretary how to act as a subordinate to a supervisor. The role of employee contains a number of expectations organized around being employed by an organization and contains norms regulating such things as leave, time for arriving at work, pay and sick benefits.

This example, which was not taken from actual research but from recollections of the kinds of behavior involved in office situations, illustrates the relationship between the notion of a social position and a social role. The important point is that, in a given group, an individual usually has a number of different functions to perform and therefore has a cluster of roles assigned to him.

A similar kind of analysis can be made for any social position in any group structure. For example, let us consider a gas station attendant or operator and ask what roles exist within his position. The following list suggests roles that might emerge from research on gas stations: (1) the pump operator role, (2) the cashier role, (3) the mechanic role, (4) the janitor role, (5) the supply clerk role, (6) the buyer role, and (7) the salesman role.

From the above discussion, it can be seen that roles form units in the structure of social positions which in turn form units in the structure of groups. It is conceptually desirable to distinguish between various functional roles that make up the position of a person in a group rather than treat the entire set of behavior expected of an actor as though it were a single homogeneous unit. Dividing social position into roles makes it easier to deal with several aspects of human behavior. First, it is easier to deal with the processes involved in social differentiation. For example, in the case of the secretary, it is possible to study an office situation and discover that over a period of time the roles listed for the particular secretary in our example have been allocated to different individuals. In other words, one role or set of roles may be transferred from one position to another, leaving intact the remainder of the social position. We may suppose that in the office described, a person was hired and assigned the function of being bookkeeper and file clerk. Two entire roles might be removed from the position of the secretary and assigned to the new employee, forming a new social position around these roles. By visualizing a different role for each function, it is possible to deal with this type of social differentiation in a more logical and consistent fashion.

Careful examination of human behavior in social situations will reveal, furthermore, that when we introduce the variables of time, place, ego-actor, alter-actor, and function into our analysis, roles will vary according to each one of these dimensions. It is easiest to illustrate this statement using the "place" variable. In the case of the secretary, the typist role is performed in one location within the office, at the typing desk where the typewriter is located. The stenographer role is performed in a different location, usually at the boss's desk. Similarly, other roles are performed in different physical settings. There is a separation in physical space among the behaviors that result from different role expectations. Similarly, when time is considered as a variable, it will be found that roles may be phased in sequence and separated by temporal space. For example, in the case of the gas station attendant, he performs the pump operator role in one segment of time and then the cashier role at a later point in time. In still another segment of time, he may perform the role of buyer for the business establishment for which he works. If we were to examine complex systems of roles, we might find that a secretary performs the role of typist for one person and the role of bookkeeper for another. In this case, the alter-actors toward whom the roles are performed vary.

The major reason for conceptually differentiating roles, however, is the functional reason. Roles consist of behaviors that perform a unique function. Since this is true, it is possible to differentiate roles from one another, to assign them to different people, to shift them from one part of the social system to another, to isolate them temporally and spatially and still have the functions performed.

Against this background, it is apparent that jobs and occupations consist of clusters of roles that imply a number of functions performed by the same individual. Similarly, they involve differentiation of a number of functions performed by the same individual within the context of work situations. The various functions around which roles are organized in a given occupation are usually related to each other in terms of the various aspects of behavior necessary to produce some product or service and to relate the production of this product or service to behavior performed by other people in group situations. This means that a social position, which in a sense represents a part of an occupation or a job in a work group, consists of a set of interrelated roles that form a dynamic system.

Strain Toward Consistency Among Roles

Two assumptions are made about the contents of roles and positions that need to be made explicit. The first assumes that between and among the various norms that are organized around a function to form a role, there exists a strain toward consistency, that is, a tendency for the norms to become mutually supportive and internally consistent with one another. Similarly, it is assumed that within a given social position there exists a strain toward consistency among the contents of various roles that make up the total position. This strain operates in such a way that if a change occurs in one of the norms related to a given function, it will result in changes in other norms related to and organized around the same function.

The strain toward consistency is based on the fact that all contents of a system, such as a role or a position, are directly linked to, and affect, all other contents of the same system. Later on in this manuscript, we will discuss the idea of role stress and strain. At that time, it will become apparent that the strain toward consistency is based on the processes through which role strains and stresses are eliminated from social systems. The reasoning to be used can be summarized briefly as follows: when the contents of a given role become inconsistent with each other, a role stress arises. For example, the stress called "role conflict" occurs. This stress or conflict is punishing to the actor attempting to play the role. Since actors are assumed to react negatively to punishment and will therefore attempt to eliminate it, they will act in ways to reduce and eliminate the stress or conflict. When such stress or conflict is eliminated, a new consistency will be established among the contents of roles. Therefore, the strain toward consistency is based on a tendency of human actors to attempt to avoid or eliminate role conflicts or stresses when they arise.

Norms, Roles and Positions as Conceptual Building Blocks

The concepts of norm, role, and position are fundamental concepts in the two forms of analysis discussed above. They serve the purposes of person-centered analysis and social systems-centered analysis equally well. This can be seen by examining the nature of the concept of social position. As a concept, social position refers to a unit of participation by a given individual in a given group. In a sense, it represents his membership in that group and his obligations to it in terms of normative expectations. In another sense, it stands for his behavior within that group in relation to other people in it.

The concept of position, it must be emphasized, is defined in such a way that (1) there is one position in a group structure for every member, and (2) the concept "position" represents his total participation in a particular group. It is apparent, however, that every individual in society participates in more than one group. As a matter of fact, most individuals belong to a large number of different groups. For each group membership, the individual occupies a separate and distinct social position consisting of a separate and distinct system of roles organized around different functions performed in these various group settings. To illustrate simply, the family of a given individual represents one group. In it he might occupy the position of father and husband. A work group in an organization represents another group, in which he might occupy the position of welder in a welding shop. A neighborhood men's poker club represents still a third group, in which he occupies still another position, and so on. Since every individual occupies multiple positions, it is apparent that the structure of groups and the participation of individuals in society must be analyzed using two different sets of concepts. The concepts of position, role and norm, however, can be used as "building blocks" to create higher order concepts. This can be done because a social position represents simultaneously a unit of structure in a group and a unit of behavior for the actor. Groups and multi-group systems are one kind of set composed of social positions. Let us examine this kind of set and compare it to person-centered sets of social positions.[5]

A group structure consists of several positions each of which is occupied by a different actor. If we project our reasoning, a multi-group system consists of several groups containing many positions occupied by different actors. These positions are organized into group structures that are linked together in various ways to form a complex system such as an organization, community or society.

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[5] Merton's concept of Status-Set is similar in some respect to the idea of situs. Merton, however, does not relate his ideas of role-sets or status-sets to specific group and organizational structures. The various roles in a role-set in Merton's sense may be played in a variety of groups. In our terms, a position is a set of roles all part of the same group structure. Similarly, a Mertonian status set may contain positions or statuses in any number of different organizations. Some may be kinship positions, other work positions, etc. In our sense all positions in a situs have to be in the same organization.

See Robert K. Merton, Social Theory and Social Structure, Revised, New York: The Free Press, 1957, pp. 368-384.

If we trace actors rather than the structures of groups and complex systems, we begin to discern the need for concepts that apply to a system or set of positions occupied by the same actor rather than to a system or set of positions forming a particular group. For example, if we analyze the participation of a man in a kinship system, we will discover a complex set of positions, all occupied by the same person. Each position exists within the structure of a different group. For example, in the family consisting of his wife and his children, a man occupies the position of husband and father and plays roles appropriate to his relationship to his wife and children. In another kinship group, the one into which he was born, he occupies the position of son and brother and plays roles in relationship to his father, mother, brothers, and sisters. In a third kinship group, he occupies the position of son-in-law and brother-in-law, and interacts with his wife's parents and siblings. In other kinship groups, he occupies positions such as nephew or uncle, and so forth. If we examined a given person's participation in the entire kinship system, we would discover a system or set of positions all occupied by the same person, each position existing within a different group structure in a complex system of groups. This set of positions, all occupied by the same actor, is a different kind of set from the one making up the structure of a group or organization. Groups are sets of positions occupied by different actors. Since this is true, the structure of a group or organization cannot be described using the same "position sets" used in studying participation by an individual. It is for these reasons that it is necessary to conceptualize the two forms of analysis labeled person-centered and group-centered analysis separately.

In the next chapter, we will outline the concepts necessary to analyze social systems using system-centered analysis. After completing this task, we will return to person-centered analysis and outline a set of parallel concepts that will enable us to deal with the participation of individuals in complex systems. After outlining these concepts, we will turn to the task of applying them specifically to the study of occupations and jobs. Figure 10a(page 60) presents a complete diagram of the two forms of analysis which will now be discussed and will serve to illustrate the ideas presented as they emerge in the discussion.

CHAPTER III

GROUP OR SOCIAL SYSTEM-CENTERED ANALYSIS

Groups are particular kinds of social systems. They are systems in which every actor has a direct relationship to every other actor. Other social systems, such as complex organizations or bureaucracies and communities, are comprised of social positions occupied by actors who may be indirectly related to each other through chains or systems of relationships. The primary differentiating characteristic of a group is the fact that it represents a closed and fully articulated system of social positions and roles in which every member is expected to interact at one time or another with every other member.[6]

Groups have boundaries that separate them structurally from other groups. These boundaries are conceptually established by the notion of a completely articulated set of relationships. This means that every position in the structure of the group system has a direct role relationship to every other position. (See Figure 5.) By direct, we mean that the actor who occupies each position plays at least one role toward every other person in the group. These roles need not be played in face-to-face relationships, but they must be played in such a way that there is no intermediate party involved in the transfer of functions or behavior between one person and another.

Roles always come in complementary pairs. For every role there is a complementary role toward which the behavior implied is directed.

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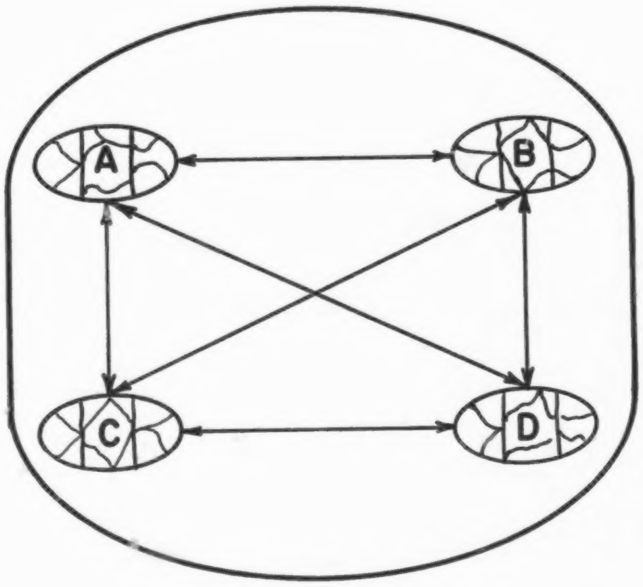
[6] Frederick L. Bates, "A Conceptual Analysis of Group Structure," Social Forces, Vol. 36 (December, 1957), pp. 103-111.

GROUP STRUCTURE



DEFINITION

A GROUP CONSISTS OF TWO OR MORE PERSONS WHO INTERACT AS OCCUPANTS OF POSITIONS CONTAINING ROLES RECIPROCAL TO ALL OTHER POSITIONS IN THE STRUCTURE OF THE GROUP.

KEY

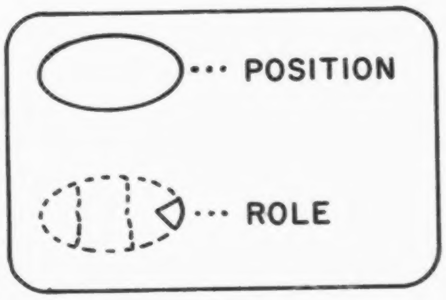


FIGURE 5

Examples of such complements are found in role terminology referring to such relationships as provider-dependent, supervisor-supervisee, salesman-customer, doctor-patient, and so forth. It is not necessary at this point to discuss in detail the logic with which group boundaries are established. Simply put, this logic amounts to saying that any person who does not bear a direct relationship through role complement to every member of a given group cannot be included within that group structure. If, for example, we are dealing with a factory in which a number of work groups such as a welding shop and a machine shop are present, and the supervisor of the welding shop is expected to interact with the supervisor of the machine shop, his interaction with the supervisor of the machine shop is not sufficient to permit us to include him as a member of that group. For the supervisor of the welding shop to be considered a member of the machine shop, he must have direct, reciprocal, or complementary role relationships with every member of that shop. When members of two groups are expected to interact as representatives of those groups without involving every member of the two groups in the interaction, it is necessary to visualize a third group. In the case of the welding and machine shops discussed above, this third group consists of positions occupied by the supervisors in relation to each other. Such a group is called an "interstitial group" and exists in order to join together two "elemental groups" that are part of the structure of the same organization. (See Figure 6.) Through interstitial groups, elemental groups are linked together into complex structures, and chains of indirect relationships are created that permit

ORGANIZATION STRUCTURE

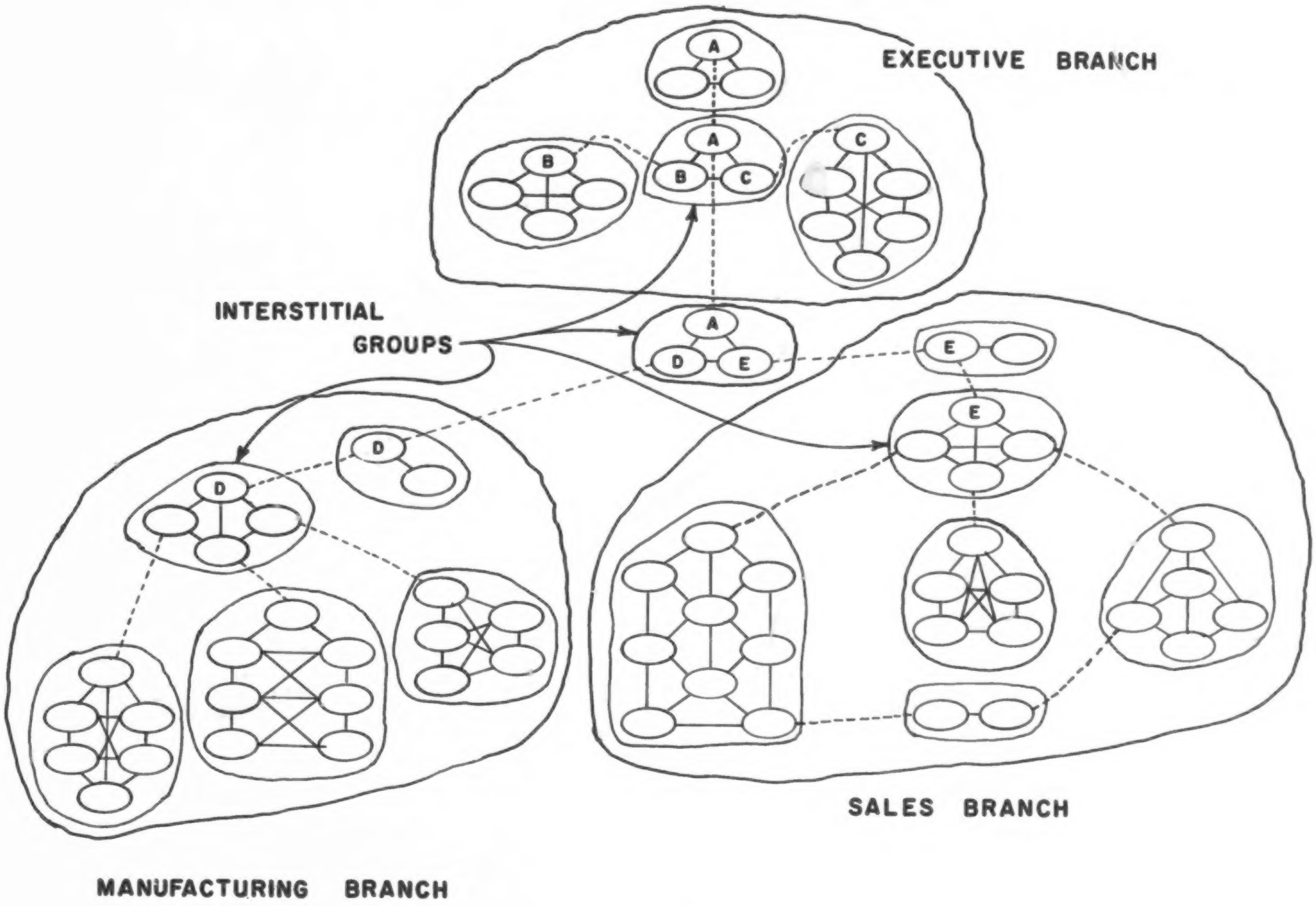

EXECUTIVE BRANCH
A
A
B
C
B
C
INTERSTITIAL
GROUPS
A
D
E
E
E
D
D
SALES BRANCH
MANUFACTURING BRANCH

FIGURE 6

the flow of information and functions of other sorts through a complex system.

Occupations in Relation to Work Groups

Most occupations are practiced in work groups that normally include persons with both similar and dissimilar occupations. All occupations, because they represent specialized work behaviors that are part of a larger social system, must necessarily involve their practitioners in social relationships with other actors. Even those occupations normally practiced by a lone worker, such as the artist, necessarily involve their practitioners in relationships with suppliers of raw materials and with customers or clients.

In order to describe any occupation, it will therefore be necessary to study the way that occupation is related to groups. To describe the relationship of an occupation to a group, the concept of social position is used. The position occupied by the practitioner of an occupation in a work-related group corresponds to the occupational behavior related to that group. Since, in societies such as ours, most occupational behavior takes place in large-scale multi-group organizations, it is necessary to understand the structure of organizations before discussing the place of occupations in that structure.

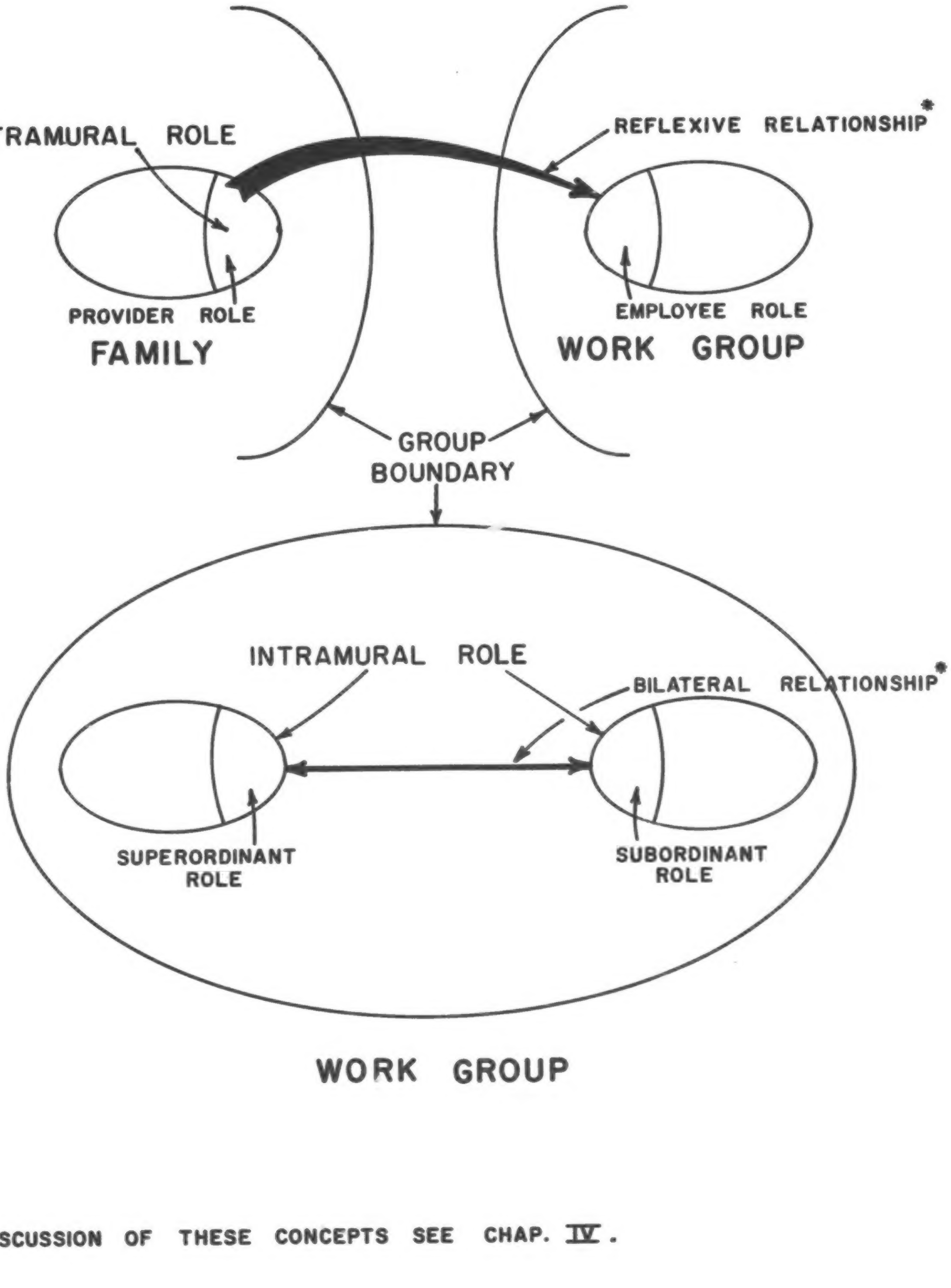
Organizations as Multi-Group Systems

An organization is a complex structure comprised of a number of groups joined together into a common system. In an organization, elemental groups are linked together by a system of interstitial groups to form a single organizational structure. (See Figure 6.) In order to understand interstitial groups and the way in which they link elemental groups together, it is necessary to introduce some new terminology with respect to roles.

There are two types of roles that need to be considered: (1) intramural roles and (2) extramural roles. An intramural role is one that requires an actor to perform behavior totally *within* the boundaries of a given group. An extramural role is one which requires an individual *to leave* the boundaries of one group and enter the boundaries of another in order to secure some kind of function, goods, or services needed and then return it to the groups in question before he can perform the role itself. (See Figure 7.) In modern, industrial society, the role of the father-husband as provider within the family is an example of an extramural role. In order for a father and husband to provide for his family, it is necessary for him to leave the family group and seek employment or income by assuming some occupational position in work groups or organizations outside the family. The provider role is extramural, since it requires behavior outside of the group in question. In contrast, the father-husband's roles as sex partner with respect to his wife or disciplinarian with respect to his children are intramural roles since they may be performed within the group.

Extramural roles have the consequence of linking several groups together through the sharing of a common member. The work group is linked to the family because the provider role requires the same person who is father-husband to become welder or supervisor of the machine shop, and so forth.

INTRA AND EXTRAMURAL ROLES


EXTRAMURAL ROLE
REFLEXIVE RELATIONSHIP*
PROVIDER ROLE
FAMILY
EMPLOYEE ROLE
WORK GROUP
GROUP BOUNDARY
INTRAMURAL ROLE
BILATERAL RELATIONSHIP*
SUPERORDINANT ROLE
SUBORDINANT ROLE
WORK GROUP

✱ FOR A DISCUSSION OF THESE CONCEPTS SEE CHAP. IV.

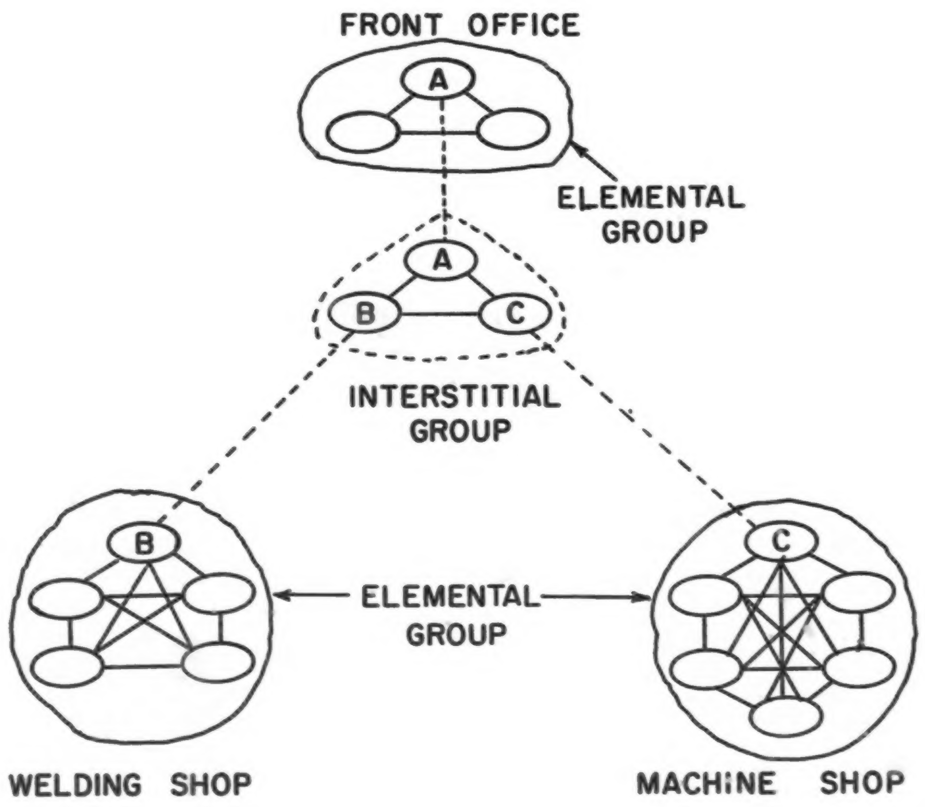
FIGURE 7

In an organization which has a welding shop and a machine shop, there may exist within the position of supervisor of each shop an extramural role which requires that person, in order to perform supervisory functions within his individual shop, to leave the boundaries of the shop and interact with other supervisors of other shops within the organization. Consequently, there would exist within the structure of the supervisor's position a role which is extramural. This role places him in a group structure different from the one in his shop and in which he would occupy a different position. In this other position, he would interact with other supervisors. The new group, created in this way, would be an interstitial group.

In Figure 8, the diagram illustrates this organizational relationship. The two groups at the bottom of the chart represent the shops we have been discussing. The one at the top represents the front office where the president of the company, his secretary and his assistants are located. Each shop and the front office are called elemental groups. The group outlined between them and joining them is an interstitial group. In this group, two supervisors and the president of the company form a committee-like coordinating interstitial group within which plans are made; orders, directions and instructions are passed on; and other activities are carried out. These activities result in coordinating or synchronizing the behavior of various people in various groups in the organization.

It is important in the study of occupations to realize that persons who are members of organizations normally occupy several positions in the

WORK GROUPS JOINED BY INTERSTITIAL GROUP RELATIONSHIPS


FRONT OFFICE
A
ELEMENTAL GROUP
A
B
C
INTERSTITIAL GROUP
B
ELEMENTAL GROUP
C
WELDING SHOP
MACHINE SHOP

KEY

○ POSITION

A, B, C – ACTORS

— BILATERAL RELATIONSHIP

--- REFLEXIVE RELATIONSHIP

◯ ELEMENTAL GROUP

◌ INTERSTITIAL GROUP

FIGURE 8

structure of the organization. In the case outlined here, the supervisor of the welding shop has at least two positions, one as supervisor within that shop, and the other as a kind of co-supervisor, or foreman, in a coordinating group which includes people other than members of the machine or welding shops. In most organizations, every individual occupies more than one position since he participates in more than one group.

In order to analyze the job of a person in an organization, it is necessary to visualize several positions, located in a structure of several groups, as being included within the structure of a job. In the case discussed above, the job of supervisor of the machine shop implies at least two positions in different group structures. A little thought will produce the realization that in complex organizations the jobs of certain individuals may contain dozens of different positions in different group structures. This can be illustrated by the case of the college professor. One position occupied in the structure of the university by a college professor is in the faculty group of the department to which he belongs. This position implies a set of roles performed toward other faculty members and toward secretarial staff members of that particular department. A second, third, and sometimes fourth position is occupied within classroom groups comprised of the professor and his students. The roles played by the professor in the classroom are different from the set of roles he plays toward other faculty members in his departments. In addition to the groups mentioned, the professor might be a member of one, two, or three faculty committees in which he has a different set of roles to perform, toward a different set of people, from those performed in the department or in the classroom. Similarly, he occupies positions with respect to such groups as the registrar's office, the treasurer's office, the computer center, the library, and so forth. Wherever it is possible to discern the faculty member interacting with a different set of people in the context of a different set of roles, it is possible to identify a group structure in which he occupies a position. His total position within the organization consists of a large cluster of positions all occupied by the same person but located within the structures of different groups.

An important point in the study of occupations and jobs is the idea that a job can consist of a number of different positions occupied by the same person in different group structures within the same organization. Occasionally, a job will include positions in several different organizations or in groups outside the organization that employs the worker. The positions occupied by a salesman for a given company - let us say a salesman for an automobile agency - contain extramural roles that require the salesman to leave the boundaries of the company itself and occupy a position and play roles in relation to customers. This salesman-customer relationship exists in an interstitial group that stands between a family and a business firm or between one business firm and another.

As we shall see later, some occupations have structures that consist not only of a cluster of positions that exist within a given organization, but also of positions that exist outside a given organization in the structure of a community. This is true of all occupations that involve client or customer relationships. Because occupations and jobs contain roles in the larger community, it is necessary to continue our analysis of social systems to the level of the community and to define broadly what the structure of a community is like in relation to occupational analysis.

When a person is required by an extramural role contained in a position in one group to occupy a position in a totally different group a relationship is created between two positions in two different groups. This relationship exists because the same actor occupies the two positions and because an extramural role in one requires him to occupy the position in the other. This kind of relationship is called reflexive. In contrast to it, another form of relationship exists between two positions occupied by different actors in the same group. Here, different actors are required by their roles to interact with each other. Such a relationship is called a bilateral relationship. Thus, in Figure 8, a reflexive relationship exists between the position occupied by the supervisor of the welding shop in that shop and the position he occupies in the interstitial group. A bilateral relationship exists between his position in his shop and the positions occupied by other members of the shop.

The Structure of Communities

The community is a social system that contains within its structure, groups as independent entities and complex organizations or multi-group systems. A community consists of a system of groups and organizations that are joined together in a complex network of social relationships. In attempting to understand the structure of communities, it is therefore important to consider the kinds of relationships that exist between and among groups and organizations that form units in community structure. By employing the notions of extramural roles and interstitial groups, it is possible to visualize how communities are created from small groups and multi-group systems. To aid us in this process, it is necessary to make several observations about the nature of groups and organizations. In speaking of groups in the following sentences, we will be referring only to what we have called elemental groups, and particularly to those elemental groups that are not joined to other elemental groups to form an organization. Such groups and organizations consist of a number of people who occupy positions and play roles that are organized around producing some common product or accomplishing some common function. The structure of such social entities as groups or organizations represents a division of labor among the members. In the case of elemental groups, the division of labor takes place among the various positions that form the group structure. Each position contains specialized roles that actors perform within the group. In the case of organizations, in addition to this within-group specialization of actors, there exists a between-group differentiation and specialization of functions.

This means that groups such as families, which are elemental groups, specialize in producing certain functions both for their members and for the larger system of which they are a part. Their specialization in the production of these functions creates a situation wherein they are dependent on other groups and organizations within the larger social system. They must depend on others for functions that they themselves do not produce because of their specialization. Within organizations, the same kind of situation exists among elemental groups. When we speak of a welding shop and a machine shop as being parts of the same industrial organization, we are speaking in terms of groups that specialize in the production of some function for the larger organization. Obviously, such groups are dependent upon each other for the production of other parts of the functions that are necessary in producing the organization's product. Similarly, if we were to examine organizations as total entities, we would find that they are specialized in terms of the kinds of functions they produce for the larger society. Hospitals produce one set of functions, schools another set, automobile factories another set, government agencies still another, and so forth.

Types of Social Relationships

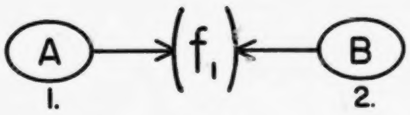
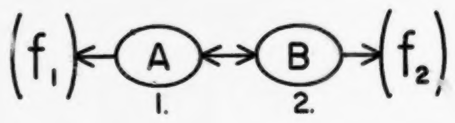
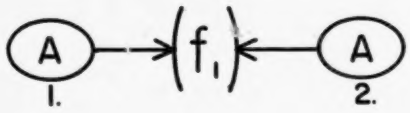
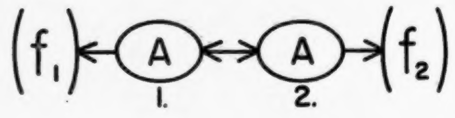
The specialization among organizations and groups in society creates two kinds of relationships that need to be identified and explored, in order to understand the difference between organizations and communities as types of social systems. These two types of relationships will furnish valuable tools for analyzing the structure of occupations. It will be found later that certain occupations contain within their structures more of one type of relationship than the other. This makes it possible to contrast occupations, according to the way they fit into the total social system of which they are a part.

The two types of relationships found among units in social systems are: (1) reciprocal relationships, and (2) conjunctive relationships.

Reciprocal and Conjunctive Relationships

A reciprocal relationship exists between two roles when the roles represent two specialized aspects of the same functional process. Another way of putting it is to say that when two roles, related to each other, are designed to contribute to the production of the same function for the same system or group, a reciprocal relationship exists. A conjunctive relationship exists between two roles when the roles are designed to produce different functions for two different systems. Several hypothetical cases illustrating these concepts will help in understanding them. First, let us return to the supervisors of the welding and machine shops in the same factory. Let us assume that these supervisors have roles that require them to establish a relationship between each other in order to coordinate the activities of their shops. When such a relationship is established, an interstitial group is formed. Each supervisor has within his position in this new interstitial group a role called co-supervisor. These two roles are directed toward accomplishing a common function, namely, coordinating the work of the two shops in producing a common product upon which the two shops are working in specialized activities. In Figure 9, position "1" represents the welding shop supervisor, position "2" represents the machine shop supervisor and f_1 represents the common function that they are attempting to perform for the total system of which they are a part, namely, the factory.

RECIPROCAL AND CONJUNCTIVE ROLE RELATIONSHIPS

TYPE	*RECIPROCAL*	*CONJUNCTIVE*
*BILATERAL**		
*REFLEXIVE**		

KEY

A, B, = ACTORS

$○_1$, $○_2$, = POSITIONS

F_1, F_2, = FUNCTIONS

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* FOR A DISCUSSION OF THESE CONCEPTS SEE CHAP. IV.

FIGURE 9

In contrast to this, let us think of the president of the corporation in which these shops are located, and of his relationship to a firm from which steel is purchased for use in the welding and machine shops. Let us assume that the president of the corporation acts as a buyer of these materials and therefore has a role as buyer that can be represented in Figure 9 by position "1" under conjunctive relationships. This role of buyer is directed toward performing a function, f_1, for the factory in which the welding and machine shops are located. The function amounts to importing into that organization the raw material necessary to carry on the productive activities of its members. Now in order to act as buyer, the president of the corporation must establish a relationship with someone who has a seller role contained within a position in an organization that sells steel. Let us assume that position "2" in the "conjunctive" column represents the seller role of a salesman for a steel company. By acting as a seller, he is performing a function for the steel company. His activity is directed toward some other function, f_2, in a system altogether different from the factory. His objective is not to supply the manufacturing firm with steel so that they can produce their product, but instead, his objective is to secure a profit for the steel corporation through the sale of its product. The roles involved in this analysis are directed toward performing functions for two different systems.

Division of Labor and Conjunctive Relationships

The specialization of functions created by the division of labor in society creates a situation of interdependence among various organizations and groups that go into making the structure. This interdependence makes it necessary for separate organizations and groups to exchange functions in order to survive and to function themselves. Therefore, the structure of the social system must provide a system of relationships through which specialized groups and organizations can exchange their functions or products. In exchanging functions or products, a situation is created whereby a given group or organization, by performing a function for itself, indirectly performs a function for another organization. This can be seen in the case cited above. When the president of the manufacturing firm seeks to buy steel to supply his workers with raw materials, we have said he is performing, first and foremost, a function directly for that manufacturing firm. However, when performing this function, he is also indirectly performing a function for the steel company, since in the act of purchasing the steel, he enables the representative of that firm to perform his role for that particular organization. Through such chains of indirect linkages among the parts of complex systems, communities and total societies are joined together. Functions and products, goods and services flow from one part of society to another through such chains of social relationships.

Occupation and Relationship Types

Occupations form many of the links in the chain of relationships that join one part of society to another. Some occupations have as their main function furnishing a portion of the linkage between one part of the social system and another. This means that some occupations must contain many conjunctive relationships within their structure. Others do not make significant contributions to the linkage between individual parts of larger social systems and, therefore, contain primarily reciprocal relationships within their structure.

It is easy to see this by contrasting the roles and positions of the salesman as one occupational type, and the welder as another. The welder's occupation may involve a system of positions and roles that are contained principally within the boundaries of a given organization and is, therefore, describable in terms of a network of reciprocal relationships. On the other hand, the salesman has as his function the transfer of goods from one organization to another and he has, therefore, a larger number of conjunctive relationships within his occupational structure.

Relationship Types and Social Interaction Forms

It is important to realize that the two types of relationships are associated with two characteristic forms of social interaction: (1) cooperation, and (2) conflict or competition. Reciprocal relationships are essentially cooperative in nature, since the two parties involved are both oriented toward the production of a common function. Usually, the formal structure of the roles in terms of norms calls for cooperative behavior. The norms prescribe a kind of mutual aid and assistance between the persons in the relationship. This does not mean, of course, that real individuals, in acting out these roles do not, in some real situations, engage in conflict or in hostile acts toward each other, but simply that the behaviorial expectations contained within the norms prescribe a kind of cooperative effort.

In conjunctive relationships, in contrast, this is not true, but instead, underlying such relationships is at least a potential for conflict that is not contained within the structure of the reciprocal relationship. The norms prescribing the roles played in conjunctive relationships are designed to serve two different systems. The salesman, for example, is expected to have his company's interest at heart in acting out the role of seller. He is expected to act in such a way as to get the best deal for his company. Similarly, the buyer role, completing the relationship, contains norms which dictate that he must seek the best deal for his particular group or organization. The society, however, provides a set of norms that control the potential for conflict and make it possible for an exchange to occur. For example, there are the norms of contract, price and exchange that involve receipts, payment on demand, and so forth. These norms regulate the relationship and prevent conflict, since conflict would prohibit the exchange that needs to occur.

Regulation is necessary, since the differentiation of the system into specialized parts makes it vital to the survival of the whole system that exchange occur among specialized parts. Were the potential conflict underlying conjunctive relationships left uncontrolled by normative rules, the exchange would be threated and, as a result, both functions required for different social systems would go unperformed. Again, it is important to realize that, in talking about the orientation of the two roles involved in conjunctive relationships, we are talking about the ideal behavior expectations or norms involved. Real individuals, in acting out these rules, may deviate from these expectations. A salesman may act toward a customer, or a customer toward a salesman, as if the relationship were reciprocal. For example, a salesman may sell his brother-in-law a product at a price that is not in the interest of his own company but in the interest of the brother-in-law's company. This would be real behavior of a reciprocal sort in contrast to expected behavior of a conjunctive sort.

We have made the point that some occupations are heavily involved in conjunctive relationships, while others are not. In terms of social interaction, this implies that some occupations are exposed to conflict relationships to a greater extent than others. If this is true, it is also probably true that personalities capable of dealing with conflicts fit certain occupations better than others.

Communities and Organizations as Distinct Structural Types

Now it is possible to define the structure of communities as opposed to the structure of organizations by using the concepts of reciprocal and conjunctive relationships. An organization is a complex system comprised of several groups within which all of the relationships between the various roles and positions are reciprocal. In contrast, a community consists of a number of groups and organizations that are joined together by a system of conjunctive relationships. This system of conjunctive relationships provides a network through which an exchange of functions may occur between specialized parts of the larger social system.

A word needs to be said about interstitial groups in connection with communities. When the salesman, in the steel firm, and the president of the manufacturing firm, play their roles toward each other, they form a social group. This group may exist only for a short period of time, or it may meet only intermittently, but it is, nevertheless, a group. Specifically, it is an interstitial group. This group, in contrast to the one that exists within an organization, has at its core a conjunctive relationship. In other words, we can think of two kinds of interstitial groups. One type exists within an organization and consists of representatives of different specialized groups within the same organization, all of whom are performing specialized aspects of a single function. Such interstitial groups have reciprocal relationships among the parts. Another type of interstitial group exists between two organizations or between a group outside of an organization and the organization. This type contains individuals within it who represent different interests and, therefore, perform functions for different systems. This type of interstitial group has at its core a conjunctive relationship. For convenience, we can call the first type a reciprocal interstitial and the second type a conjunctive interstitial group. Reciprocal interstitial groups are important units in binding organizations together. Conjunctive interstitial groups are the cement that holds communities together as social systems.

Before an analysis of social system structure is complete, some consideration needs to be given to society, the larger social system of which communities are a part. Society may be viewed as consisting of a number of communities that are linked together through networks of relationships. This linkage includes both conjunctive and reciprocal relationships. Since some organizations transcend the boundaries of single communities, chains of reciprocal relationships may extend from one community into the next. Similarly, two organizations in different communities may establish conjunctive relationships. For example, the steel firm may be located in one community and the manufacturing firm which buys its steel in a different one. Thus, two communities are linked together by a conjunctive relationship into a larger community system.

A manufacturing firm may have various parts of its organization located in different communities. The welding operations for a given firm may be located in one community and the machining operations in a different one. Thus, the two communities could be linked together into a larger system by reciprocal relationships. This means that society, a larger system than a community, includes both reciprocal and conjunctive linkages between component communities.

For the study of occupations, this means that some individuals will have occupations containing positions located in different communities. Were this not so, it would be impossible to link communities together into larger social systems. This also has implications for contrasting the nature of different sorts of occupations. Some occupations will have structures confined to single communities, while others will have structures that transcend the boundaries of a given community. This has implications for describing the kind of person who can perform the occupational roles and the kinds of positions he can occupy in the rest of the social system that comprises the entire society.

Summary of System-Centered Analysis

We have now completed an outline of the basic concepts necessary to understand system-centered analysis. We began at the microscopic level with the concept of norm and act. At that level, the structure of a system consists of normative units or behavior expectations calling for acts that one person performs toward another. We went on from there to point out that norms and acts form larger systems called roles, which are combined into even larger systems called positions. These positions represent units of participation of individuals in groups. Groups structures, the next level of social system analysis, consist of several social positions joined together in a complete and closed system of relationships.

Through the existence of extramural roles that create interstitial groups, elemental groups are joined to form a common organizational structure. Communities form still larger systems that contain organizations and groups as parts. These parts are joined by interstitial groups, but of a sort different from those that link elemental groups in organization. In communities, elemental groups and organizations are joined by interstitial groups containing conjunctive relationships, while in organizations, groups are linked to one another by reciprocal relationships. Finally, we discussed society as the largest social system with which we will be concerned. It consists of a number of communities joined together by both conjunctive and reciprocal relationships.

At each of these levels of analysis, beginning at the microscopic level of norm and act and extending through the macroscopic level of society, we have been concerned with the way in which a system is put together. Because we are aiming toward a discussion of occupations, we have pointed out how occupations and the individuals who perform them are related to the social system. However, it is important to realize at this point that our conception of the structure of organizations, communities and societies has not been in terms of individuals as total sociological entities. Instead, we have focused our attention on action systems. It is necessary now to return to the concept of social position and begin to develop new concepts that will facilitate person-centered analysis. This kind of analysis focuses attention on the individual actor and his involvement in the social system and regards the actor as an action system containing his own processes of equilibrium, change, growth, development, and so forth.

CHAPTER IV

PERSON-CENTERED ANALYSIS

Situs and Station Concepts

In person-centered analysis, attention is focused on the individual actor and on his participation in social systems. In contract, group-centered analysis focuses attention on the social system itself and on its structure. These forms of analysis are shown diagrammatically in Figure 10a. When focusing attention on the individual actor and his participation in social systems, one must be prepared to deal with sets of positions that comprise a different kind of unit from a group structure. A social position corresponds to the place occupied by an individual in a particular group. It consists of a set of roles performed by that individual toward other individuals within the boundaries of that one group. Complex systems, such as organizations or communities, are comprised of many groups, and individuals normally occupy more than a single position in such structures. Therefore, if one is to speak of the participation of an individual in the structure of a multi-group system, such as an organization, he will have to conceive of a new kind of unit of social structure comprised of a number of positions all within the boundaries of a given organization. Social situs, which consists of several positions occupied by the same actor within the context of a given multi-group system, is a concept which may be used for this purpose.

A group structure is comprised of a set of positions each of which is occupied by a different actor. This means that it is a set of

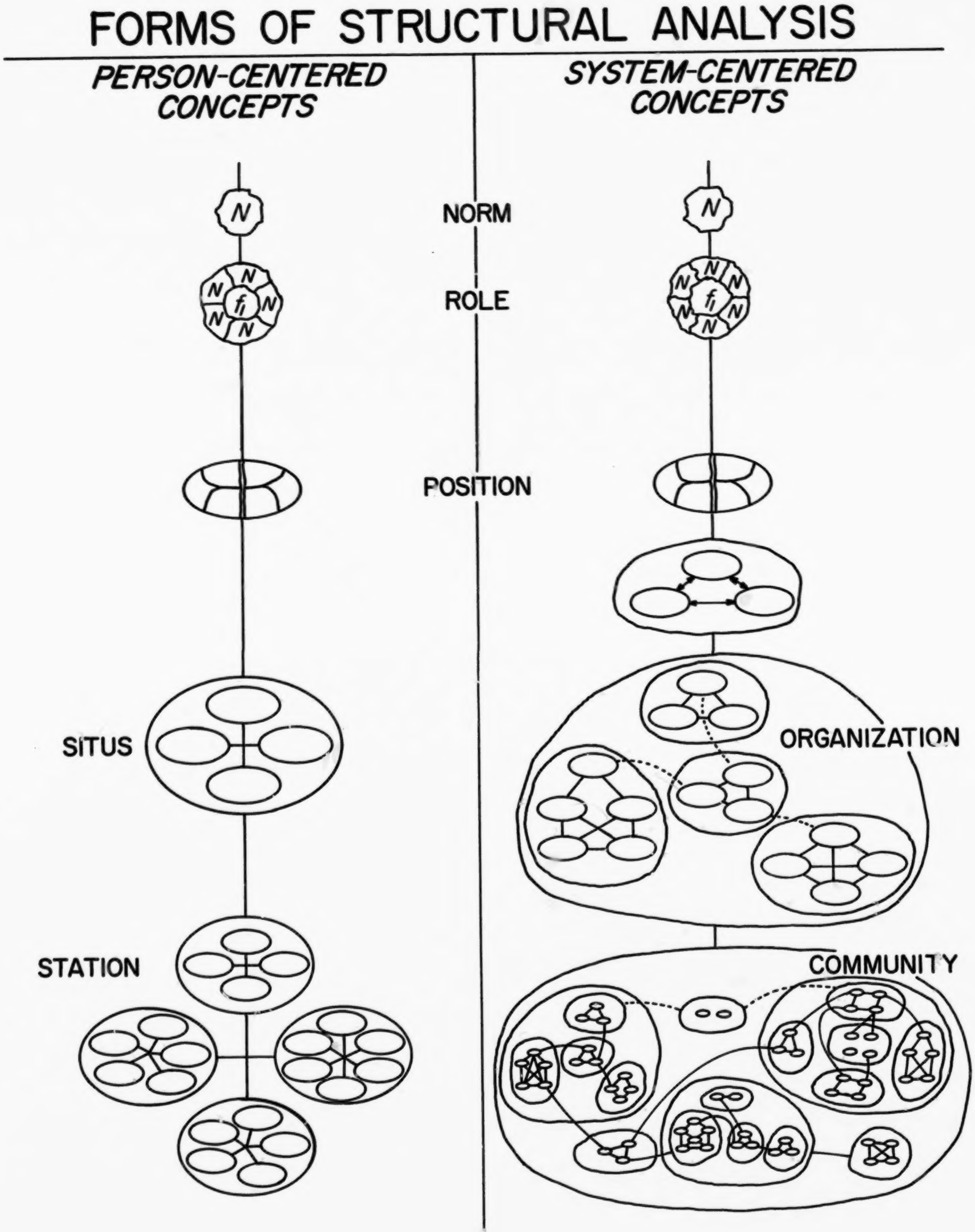

FORMS OF STRUCTURAL ANALYSIS
PERSON-CENTERED CONCEPTS
SYSTEM-CENTERED CONCEPTS
N
NORM
N
N
N
N
N
N
f_i
ROLE
POSITION
SITUS
ORGANIZATION
STATION
COMMUNITY

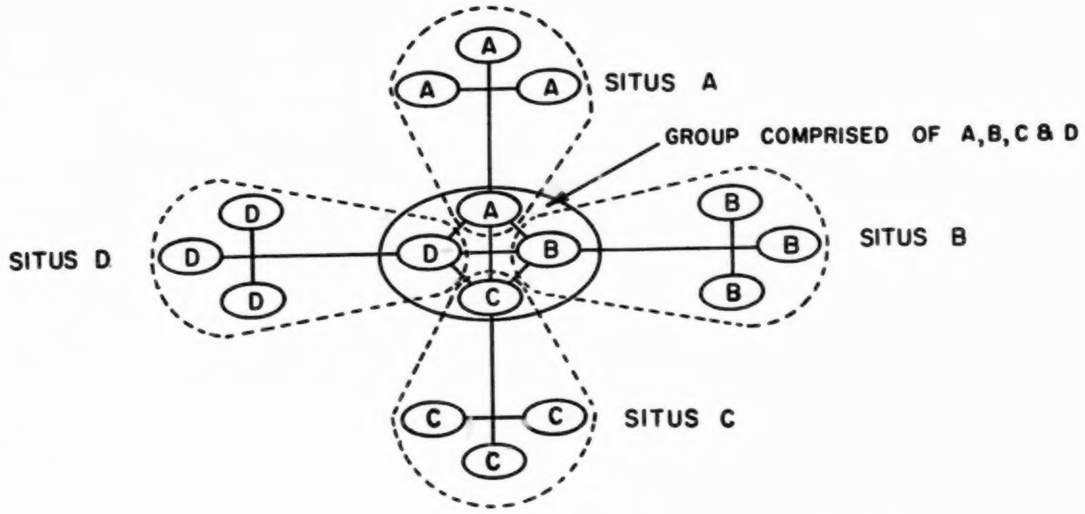
FIGURE 10A

positions in which the actor changes, or is different for each position that forms a unit in the set. In contrast, a situs is a set of positions in which each position is occupied by the same actor. In other words, as we move from one position to another within a situs the actor remains constant. In a group structure each position represents the participation of a different actor in the activities of the same group. In situs structure, each position represents the participation of the same actor in the activities of a different group. (See Figure 10b.)

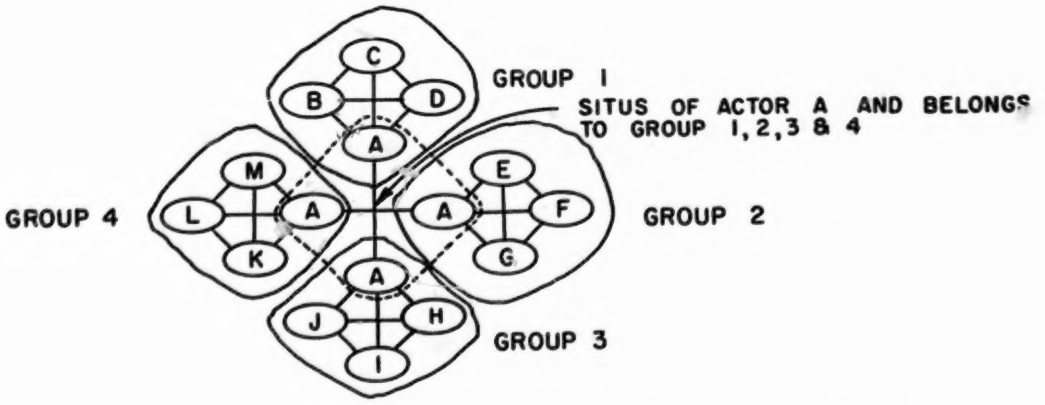
Specifically, all of the positions that make up a situs are included within the structure of the same organization, or "multi-group system." Each position, however, represents the place occupied by a given actor in a different group within that organization.

Since it is also true that a person may participate as a member in a number of complex organizations and, therefore, may occupy a number of situses in society, it is necessary to conceive of an even larger, more complex system of positions to represent the total participation of the individual in society. This larger unit is shown in Figure 10a as the social station of a person. A station consists of a combination or set of several situses. Each situs consists of a number of positions all included within the same complex organization, and each position represents membership in one group. The concepts of situs and station permit analysis of the participation of the individual actor in complex social systems by providing a conceptual means of classifying his participation, first, in complex organizations, and then, in communities or societies. (See Figures 11a and 11b.)

CONTRAST BETWEEN GROUP AND SITUS CONCEPTS


A
A
A
SITUS A
GROUP COMPRISED OF A,B,C & D
D
SITUS D
D
D
A
D
B
C
B
B
SITUS B
B
C
C
SITUS C
C

A. GROUP, SHOWING SITUSES OF EACH GROUP MEMBER


C
B
D
GROUP 1
SITUS OF ACTOR A AND BELONGS TO GROUP 1,2,3 & 4
A
M
E
GROUP 4
L
A
A
F
GROUP 2
K
G
A
J
H
GROUP 3
I

B. SITUS, SHOWING GROUPS IN WHICH EACH POSITION IS LOCATED

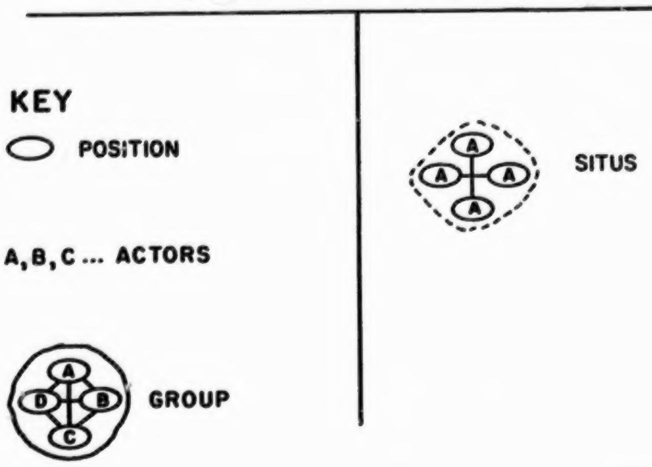

KEY
POSITION
A,B,C ... ACTORS
A
D
B
C
GROUP
A
A
A
A
SITUS

FIGURE 10B

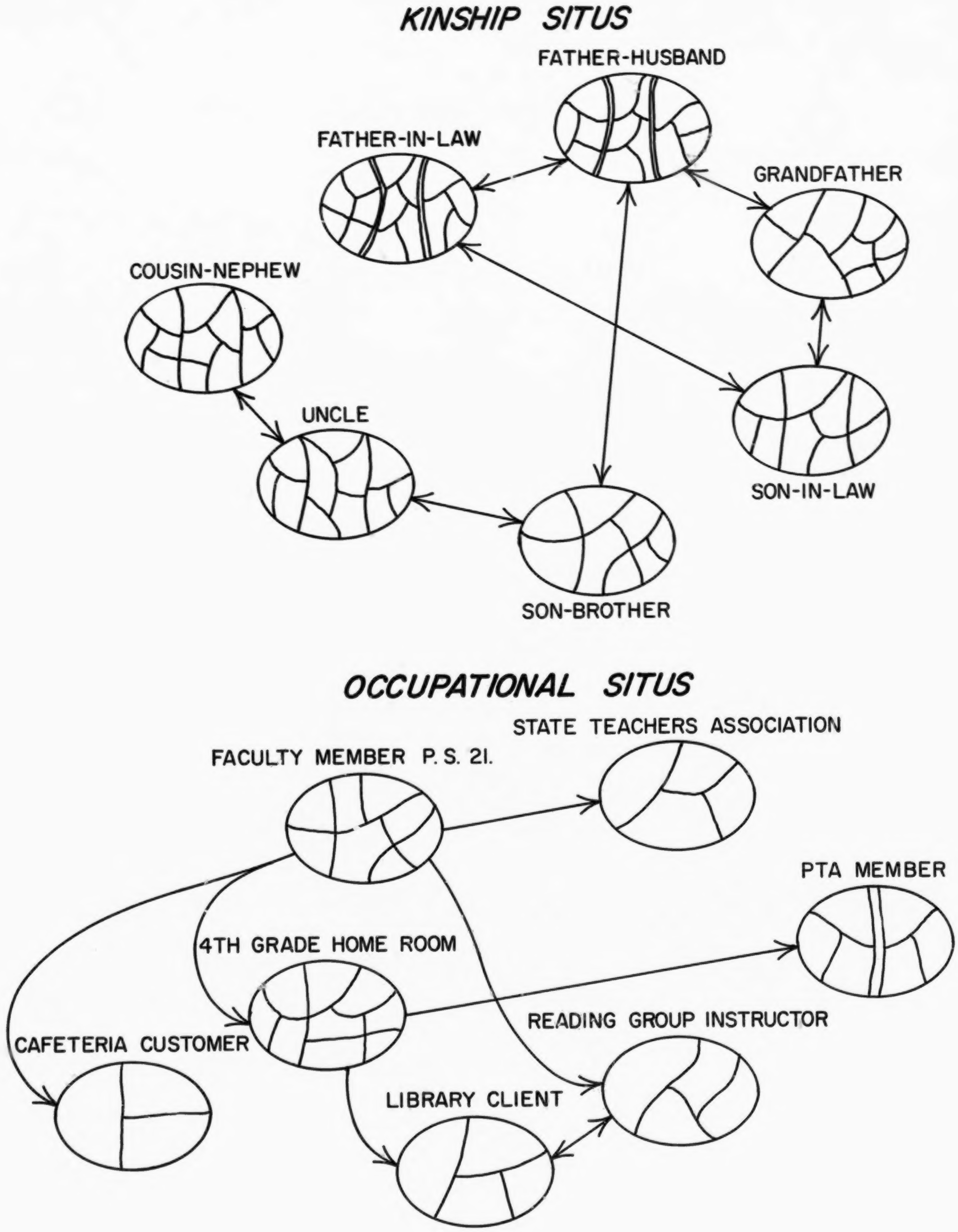

KINSHIP SITUS
FATHER-HUSBAND
FATHER-IN-LAW
GRANDFATHER
COUSIN-NEPHEW
UNCLE
SON-IN-LAW
SON-BROTHER
OCCUPATIONAL SITUS
STATE TEACHERS ASSOCIATION
FACULTY MEMBER P. S. 21.
PTA MEMBER
4TH GRADE HOME ROOM
READING GROUP INSTRUCTOR
CAFETERIA CUSTOMER
LIBRARY CLIENT

FIGURE IIa

STATION STRUCTURE

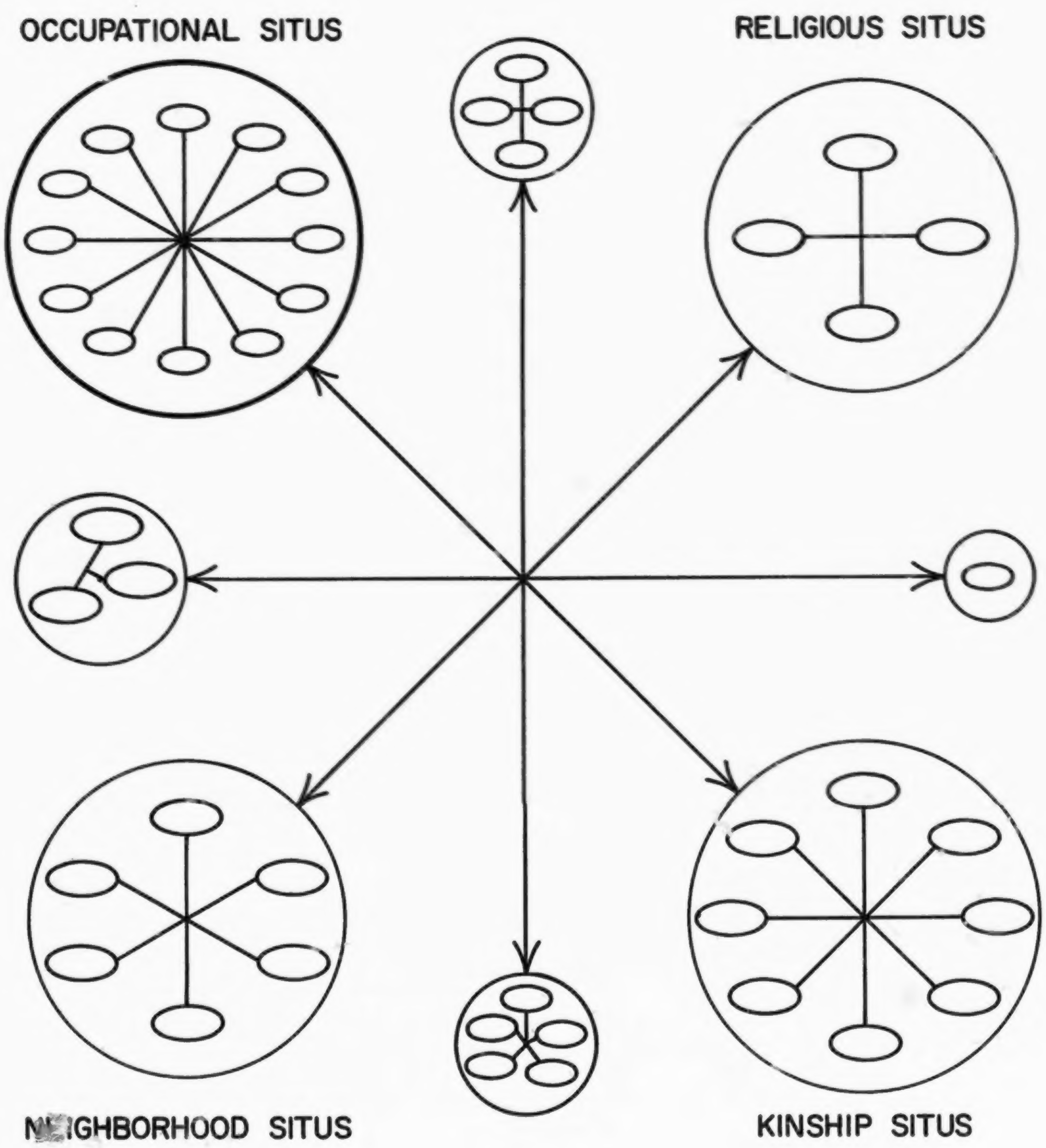

OCCUPATIONAL SITUS
RELIGIOUS SITUS
NEIGHBORHOOD SITUS
KINSHIP SITUS

FIGURE IIb

System Versus Person-Centered Analysis

It is inefficient, if not impossible, to conceive of the structure of a society, a community, or an organization in terms of a system of stations or situses joined to each other. To do this would cause us to lose sight of the fact that groups involve only a part of the behavior (or social participation) of each actor. This, in effect, means that it is necessary to conceive of the structure of social systems in a way that is different from the one used in conceiving of the structure of a person's participation in that system. A multi-group system, such as a factory, consists of a system of groups joined to each other by systems of relationships. It does not consist of a system of situses joined together by a system of relationships. Although the latter is a point of view which could be taken, it would be difficult to study the functioning of an organization by conceiving of it structurally in terms of individual or person-centered units.

Occupations as Person-Centered Concepts

An occupation is a person-centered concept. Occupations are a type of situs and consist structurally of a number of positions, each in different work group structures. This idea is illustrated in Figure 11a with a schematic diagram of a kinship situs of a person and the occupational situs of the same person. It shows that the person's station consists of the kinship situs, the occupational situs, and other situses in other organizations within the society. Let us examine Figure 11a to explore the various ramifications of the situs concept.

Kinship Situs

In Figure 11a a diagram of a kinship situs is offered. It shows a number of positions all occupied by the same individual in the kinship structure of a society. Each position is in a different group structure. For example, the individual being analyzed is a father and husband in a family consisting of his wife and children. In another family, he occupies the position of son and brother with respect to his own parents and siblings. He also occupies the position of grandfather with respect to his children's children, father-in-law, son-in-law, brother-in-law with respect to his wife's family, and uncle with respect to his siblings' children. Each of these positions contains a different repertoire of rules assigned by the culture of the society to the particular individual in question. In other words, it would not be proper to say that there is an uncle role that is different from the father role. Instead, we would say that there is a set of roles performed by the uncle toward his nephews that is different from the set of roles performed by a man toward his own children. Also different is the set of roles performed toward his own mother and father. In other words, if we are to describe the structure of the kinship system of the society, it will be necessary to visualize a number of kinship groups within which there exist a number of positions occupied by the same person. Within each of these positions, there are a number of roles. The cluster or set of positions in family groups forms the kinship situs of the person in the society.

Occupational Situs

In Figure 11a an occupational situs is also shown. Let us assume that the same person whose kinship situs was examined has the occupation of public school teacher. Being a public school teacher involves an actor in membership in a number of groups in the public schools and in groups closely associated with them. For each of these group memberships, it is necessary to conceive of a different social position containing a system of roles. Thus, in Figure 11a we see the position of faculty member at Public School 21. This position is in the group consisting of other teachers, principal, and staff of the school in question. It contains roles that the person plays toward his colleagues and toward the principal in the faculty group. Another position shown is that of teacher of the fourth grade homeroom. It exists within a different group from the one in which the faculty member position exists.

The roles performed toward students are obviously different from those performed toward colleagues. This means that they form a different and distinct set of roles which form a different and distinct position. Let us assume that the school being examined is organized in such a way that there are a number of reading groups to which students are sent during the day for special instruction in reading, and that the particular teacher being examined is the instructor in Reading Group No. 3. This is still another position occupied by the teacher and it contains a set of roles performed toward members of the reading group. Another position is occupied by the teacher with respect to the library and still another with respect to the employees and operators of the cafeteria in the school.

The teacher may also be a member of the Parent-Teacher Association and a member of the State Teachers Association. Each of these group memberships represents a different position.

The total occupational situs of the person being examined, then, contains at least seven different positions in seven different groups. Each position contains a number of roles. Since this is an "armchair" analysis, rather than one based on real data, it is likely that we have understated the number of positions and roles involved in the public school teacher's occupation rather than overstated them. In order to describe and analyze the structure of this particular person's place in the public school system, we would have to identify the various groups to which he or she beongs and to analyze the roles which make up the position he or she occupies within these groups. Once this has been done, we would be able to describe the job structure of that particular person. In other words, the job, which amounts to the occupational situs as seen in a particular organization, consists of a number of positions containing differing roles. In order to describe the occupation of teacher in a given society, it would be necessary to examine a large sample of teaching jobs using the same concepts outlined above to determine what positions and what roles normally occur within the job situs of the teacher. As shown in Figure 11b, the area of an individual's greatest participation in society is symbolized by his station. A station consists of a system of all of the situses occupied by the same person.

Situs and Strain Toward Consistency

It is assumed in our frame of reference that a situs is a kind of system within which there operates a strain toward consistency among the various parts of the system. Thus, the kinship situs shown in Figure 11a represents a number of interrelated positions and roles, all performed by the same actor, within which processes producing internal consistency operate. Similarly, an occupational situs consists of a system of positions within which a strain toward consistency also operates. Finally, the station represents an even larger system within which the same kind of processes are present. It is our hypothesis that the smaller and less complex the unit of structure, that is, the closer to the level of the role, the more pronounced the strain toward consistency among the various parts will be. This means that there is apt to be a greater tendency for consistency to be maintained among the norms forming a single role than among the various roles in a given position. Therefore, the strain toward consistency is stronger within a given position than among the various positions forming a situs, where it is in turn stronger than among the various situses forming a station. As a matter of fact, this situation can be described in terms of structural distance.

We will define distance in terms of the boundaries existing between two parts of a structure. Two norms forming the same role are contained within the same boundary, that of the role, and no boundary needs to be crossed to move from one norm to another. Therefore, two norms within the same role are structurally a minimal distance apart. For purposes of measurement, let us say that two norms of the _same_ role are one unit of distance apart. Two norms that are part of two different roles contained within the same position, but performed toward the same actor, are farther apart, and are defined as being two units of distance apart. One boundary, that between the two roles, must be crossed between one norm and the other. Still farther apart would be two norms contained in two roles where one role is performed toward one actor and the second role is performed toward another actor, both of whom are part of the same group. These norms are three units of distance apart. Four units of distance exist between two norms performed by the same actor in roles located in different group structures. In Figure 11a, this would be like one norm contained within the son-brother position and a second norm contained in the father-husband position, both occupied by the same person. Five units of distance exist between norms contained within different situses but still within the same station. (See Figure 12.) Our original hypothesis about the strains for consistency can now be related as follows: the strain toward consistency between two norms varies inversely with the structural distance between the norms. This means that the strain toward consistency among the various contents within a given station is less than between the contents of a situs, and so forth.

Structural Dimensions of Situses

Having outlined the concept of situs and illustrated its application to the study of occupations, it will now be valuable to point to a number of structural qualities of situses that may be helpful in contrasting the structures of occupations. Obviously, situses may vary in their complexity.

STRUCTURAL DISTANCE

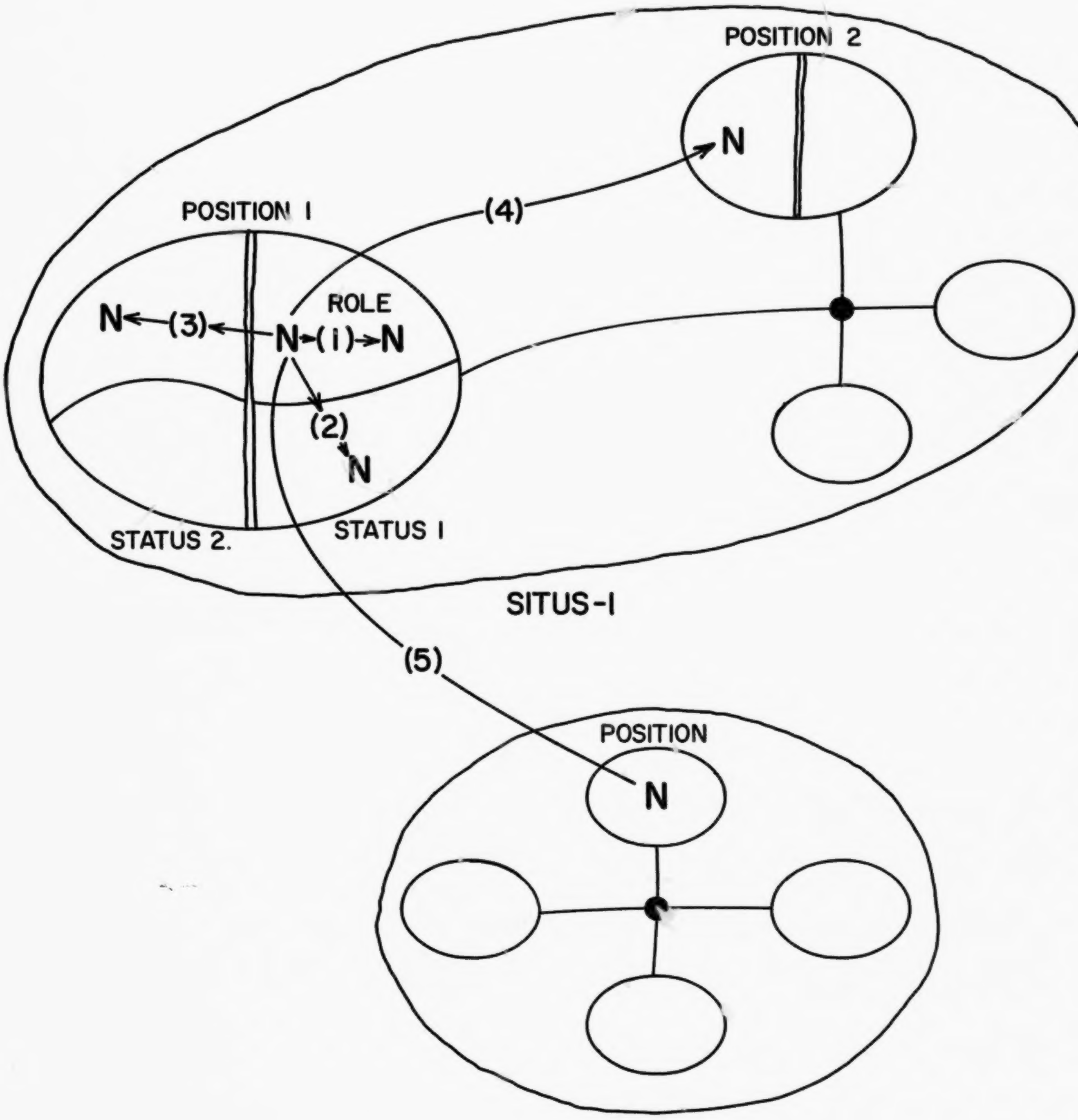

POSITION 2
N
(4)
POSITION 1
ROLE
N
(3)
N
(1)
N
(2)
N
STATUS 2.
STATUS 1
SITUS-1
(5)
POSITION
N
SITUS-2

FIGURE 12

Some may consist of only a few simple positions containing a few simple norms, while others may consist of a very large number of positions containing complex norms. In occupational terms, some occupational situses may be relatively simple in structure, while others may be relatively complex.

Complexity can be measured in several ways. It is possible to speak of two aspects of situs structure that will permit us to deal with the variable of complexity. One we will call the composition or organization of the situs. The other we will call the rank of the situs. Composition refers to the number and type of positions and roles that go into the structure of the situs and the connections between these in terms of various forms of linkage. The rank of a situs refers to the value attached to the individual positions that comprise it. Such variables as prestige, power, or rewards received for performing roles, may be used to measure rank. Let us examine briefly some variables related to these two structural aspects of situs that will be important in the study of occupations.

Situs Composition or Organization

The positions that form a situs are not independent of each other, but are connected in definite ways through a system of relationships. Looking at Figure 11a, this can be seen in the case of the occupational situs shown. The position of teacher of the fourth grade homeroom is a case in point. It exists within a given group that consists of the teacher and students assigned to a given class. The teacher has within his position a number of roles to perform toward these students. Some of these roles are extramural and require the teacher to occupy positions in other group structures and to play roles with respect to members of these other groups. This is illustrated by the connection shown between the fourth grade homeroom teacher position and the P.T.A. member position. It is assumed that within the fourth grade homeroom teacher position there exists a role which contains extramural expectations that generate a link to the P.T.A. Similarly, another extramural role exists which projects the teacher out of the homeroom and into the context of the school library. There he becomes a library user, or client, and performs roles with respect to the librarian. In other words, within the complex structure known as the public school, there exist a number of connections between positions occupied by the same person. These connections form the linkage among units in both the social system and the situses of system members.

In the social system, extramural roles create links between groups by requiring the same actor to participate in two or more different groups. This means that the two groups are linked by sharing a common member. At the same time the positions in these different groups are joined into a person-centered unit called a situs by virtue of being occupied by the same actor.

It is important to realize that situs structure is extracted analytically from the structure of an organization. In organizations specific and definite links exist between and among specific groups through the mechanism of sharing a common member. This sharing takes place because the division of labor among the groups making up an organization creates a system of interdependence among them. This interdependence is expressed structurally by the existence of extramural roles that require actors to leave one group and enter another in order to perform some functions in the first. As a consequence situs structures are created for individuals. Situses are, therefore, a consequence of the division of labor, or specializations among groups in an organization.

It is necessary at this point to distinguish between two forms of relationships that are found within complex systems. They are (1) bilateral relationships and (2) reflexive relationships. A bilateral relationship exists between two roles when the two roles are performed by two different people. In other words, this would be like the relationship between the teacher's role as lecturer and the student's role as listener. One person lectures; the other listens. The relationship is, therefore, bilateral. If, however, an extramural role exists which requires the same person to perform another role outside of the given group, we have what is called a reflexive relationship. For example, the father-husband's extramural role as provider and his role as employee in an organization, are linked by a reflexive relationship since the same person acts as provider and employee. Similarly, in the diagram of the occupational situs of teacher (see Figure 11a), the role in the "reading group instructor position" and the role in the "library-client position" are connected by a reflexive relationship.

The following generalization can be made about bilateral and reflexive relationships. Bilateral relationships exist among the parts of a group structure. In other words, all roles that are linked together within a group structure are linked together by bilateral relationships. All links which exist among group structures are reflexive in nature. Group structures are comprised, internally, of bilateral relationships. Situses and stations contain only reflexive relationships linking the various positions making up their structure.

By tracing reflexive relationships among positions and by examining their connections to extramural roles, it is possible to describe the organization of a situs.

An occupational situs would have a definite pattern or organization associated with it. If we wish to compare and contrast occupations, it would be valuable to describe the pattern of linkage among the parts of the occupational situs. Some occupations will have intricate linkages among parts, while others will have quite simple ones.

Another aspect of the structure of occupational situses mentioned above is concerned with the number of positions contained within the structure of the situs and, within these positions, the number and types of roles. If we were to examine occupations at opposite ends of the prestige ladder, for example, the occupation of janitor compared to that of physician, it would probably be true that the janitorial occupation contains fewer positions, and the positions contain fewer roles, and each role contains simpler norm arrangements than is true of the physician's situs. It is probably true that, as occupational prestige varies, the complexity of the situs composition also varies, such that the lower the prestige of the occupation, the simpler the organization of the situs, and vice versa.

Situs Rank

The social rank of a position may be measured in a number of different ways. It may be measured in terms of honor or prestige, power, authority, influence, rewards, remuneration, or wealth accruing to the person occupying the position. Since the situs consists of a number of positions, it is likely that the positions will vary in rank within a given situs. For example, within the school teacher situs shown in Figure 11a the teacher in the fourth grade homeroom has an authority role which grants him a high degree of power over persons within that particular group. In the library-client position, however, he lacks the same power with respect to members of the group. The two positions differ in the amount of power involved. Similarly, in the two groups in question, there is higher prestige accorded to the librarian in her own group than is accorded to the teacher who is acting as a client within the same group. Within the classroom situation, the prestige level of the teacher is reversed.

In order to speak of the rank of an occupational situs, it is necessary to average or accumulate the rankings of the various individual positions which comprise the situs. In other words, to talk about the rank carried by a given occupational situs, it is necessary to arrive at some process whereby the amount of power associated with each individual position in the structure of the situs will be averaged or accumulated.

A number of hypotheses exist within the field of sociology that lead to the belief that the strain toward consistency within occupational situses operates in such a way as to produce status or rank congruity within the situs. The concept of congruity, when applied to situses, means that there is a tendency, in the long run, for the rankings of the positions contained within the situs to achieve a similar level of rank in power, prestige and rewards. This would result in positions with high power also having high prestige and rewards, and so forth. Having a notion of the structure and the composition of a situs and being able to differentiate situses in terms of dimensions of social rank, makes it possible to apply the hypothesis of status congruity and status crystallization to the study of occupations more effectively.

Station Structure and the Strain Toward Consistency

A word needs to be said at this point about the structure of stations within society. If stations represent systems within which a strain toward consistency operates, it should be obvious that they place constraints on the kind of occupation that will fit into the total station. For example, if a person changes from one occupation to another and thereby changing occupational situses, that change is likely to affect the composition of other situses within the station. Thus, occupational mobility results in a change in the total life pattern of the individual. If the contents of a station are rigid and unchanging, this places constraints upon occupational mobility. This is particularly pertinent in studying the underprivileged, or minority groups, where pressures from the total society may maintain station structure in a rigid form through techniques like discrimination and segregation, and may prevent occupational mobility from taking place. In other words, station structure places structural constraints on an individual changing occupations. Similarly, occupational change will inevitably result in a reorganization of the station of a person once the change has taken place.

We can now summarize the concepts necessary for using person-centered analysis in the study of occupations. Both person-centered and social system-centered analysis employ the common concepts of norm, role, and position. When proceeding to more complex levels of structure, however, it is necessary to differentiate the two forms of analysis. Along the line of person-centered analysis, we progress from the level of position to the level of situs, an entity consisting of a number of positions, and finally to the level of station, an entity consisting of a number of situses. The situs level corresponds in person-centered analysis to the organizational level in social system-centered analysis. The station concept corresponds to the community or society level in social system-centered analysis.

CHAPTER V

SOME DIMENSIONS OF ROLES USEFUL IN ANALYZING OCCUPATIONAL STRUCTURE

Roles may be classified into various types according to their characteristics with respect to certain key dimensions of role structure. In this chapter four such dimensions of role structure useful in the classification of occupational roles are offered.

Pattern of Activity

In order to deal with the way in which roles affect the behavior of people occupying positions in group structures, it is necessary to consider the time dimension and how it relates to the structure of social positions. Obviously, a person who occupies a position containing a number of roles, let us say five or six, is not likely to perform all five or six roles simultaneously. Instead, it is more reasonable to think of behavior in terms of role-playing by assuming that roles are performed in different segments of time. In an earlier chapter, we outlined some roles that are part of the secretarial position. We said that the secretary may have a role as typist, one as file clerk, and another as receptionist, and so forth. If we were to observe secretaries in the process of playing their roles, we would probably see them acting as a typist for a certain period of time, then shifting to the role of receptionist, and back, perhaps to that of file clerk, and then to typist, and so forth. In other words, there would be sequences of behavior that involve the playing of different roles in different segments of time.

The role that is actually being performed at the moment of observation or description is called an _active_ role. If, when we observe the secretary, she is sitting at her typewriter busily typing, we say her typist role is active. Other roles assigned to her are said at this time to be in a _latent_ state. Latent roles are those that have been learned and which are normally performed by the individual, given the proper time, space, or situational variables, but which at the moment of observation are not being performed. In other words, while the secretary is in the act of typing, her receptionist role is said to be in a latent state. If certain cues occur in her environment, the typist role becomes latent, and the receptionist role active. We therefore conceptualize the behavior of a person as a series of acts that constitute active roles at any given moment of observation. Roles alternate between active and latent states.

When an individual is not operating within the context of any of the roles included within the structure of his occupation, we say that the structure itself is latent, so that the entire situs of an individual may pass through latent and active states. Obviously, this is true of persons who hold eight-hour-a-day jobs. During the period when these people are not at work, their occupational roles are said to be in a latent state. Unemployed persons may have occupations which are latent because the situational circumstances under which such roles can be performed are not present. Similarly, the retirement of an individual forces his occupational roles, which have been learned and carried out over a long period of time, into a state of latency.

The idea of active and latent roles allows us to deal with the time dimension as it applies to occupations. It allows us to conceive of the rhythm and pulse found in different occupations. For example, we can speak of occupations that have a regular, periodic, cycle of activity-latency. Such occupations would be those that are tied to a definite work schedule that begins at eight in the morning and ends at five in the afternoon. Other occupations may have less definite time sequences involved within them. For example, the occupation of television performer or artist may have no definite activity-latency cycle built into its structure. In a similar way, if we were to examine the contents of various occupations, we might find that the roles comprising various positions that go into the job situses which are characteristic of the occupation would have definite sequences built into them. A person upon arriving at work would perform one role for a certain segment of time and then shift to another and then to a third, and so forth, until a complete cycle or sequence of roles had been performed. Other occupations, in contrast, would not contain within their structure any definite phasing or sequencing of role activity-latency. The timing of occupations may be considered an extremely important way of classifying or comparing and contrasting different occupations. Some involve definite, fixed timing, and others do not. This should have considerable importance for matching personalities with occupations, on the one hand, and with the stresses that occupations place on the persons who fulfill them, on the other.

Production-line types of occupations characteristically have very rigid time schedules. Persons used to considerable freedom in scheduling their own work--for example, persons who have grown up in farm environments and experienced the rhythm and pulse of the farmer occupation--might find an assembly line type of situs particularly onerous.

Other occupations involve considerable periods of latency of all their occupational roles while the individual waits for the proper situational characteristics to emerge and bring into a state of activity the roles assigned to the occupational group. This is characteristic of many occupations organized in terms of emergency. Firemen, for example, have such occupations, as do those whose occupations are tied to the entertainment world, where seasonal variation is extremely important. Such occupations require an individual to fill his schedule during large time segments with activities not associated with the direct performance of occupational roles, but to stand ready to perform occupational roles when the proper circumstance arises. Particular problems may emerge for organizations that include such occupations within their structure. One problem might be that of maintaining competence in role performance on the part of actors assigned to the system, given the fact that inactivity is characteristic of the occupations. Consider this problem with respect to fire departments and military establishments, for example. How does one maintain a fire fighting force competent to perform all the roles necessary to that occupation, during long periods of time when no fires occur? It can be seen from this brief discussion that an examination of activity-latency cycles and sequences can yield an important way of comparing occupations and relating them to other variables.

Orientation to Group Boundaries

In many places we have referred to the difference between roles oriented within the group and those oriented toward the outside. We have used the terms intramural and extramural to refer to these two types of roles. Extramural roles are those that require the actor assigned the role to perform behavior outside of the group in which that role exists. Intramural roles are those which do not require such behavior. (See Figure 13.) Some occupations contain, within the structure of their job situses, a large number of extramural roles, while others contain few, if any, such roles. To give an example: the occupation of salesman characteristically is one that stands at the boundary of an organization and requires the salesman to perform roles in positions outside of the group structure in which his central occupational position is located. The very occupation of salesman exists in order to provide extramural connections between an organization and its environment.[8] Similarly, certain positions within organizations characteristically include large numbers of extramural roles. For example, the supply clerk in a shop in a factory has the job of relating to groups outside of that particular shop in order to provide them with things needed to perform their roles. The secretary to a busy executive in a corporation may also perform many extramural roles that link the executive office to other groups within the same organization and outside

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[8] James D. Thompson, Organizations in Action. New York: McGraw-Hill Book Company, 1967.

ORIENTATION OF ROLES TO BOUNDARIES OF GROUPS

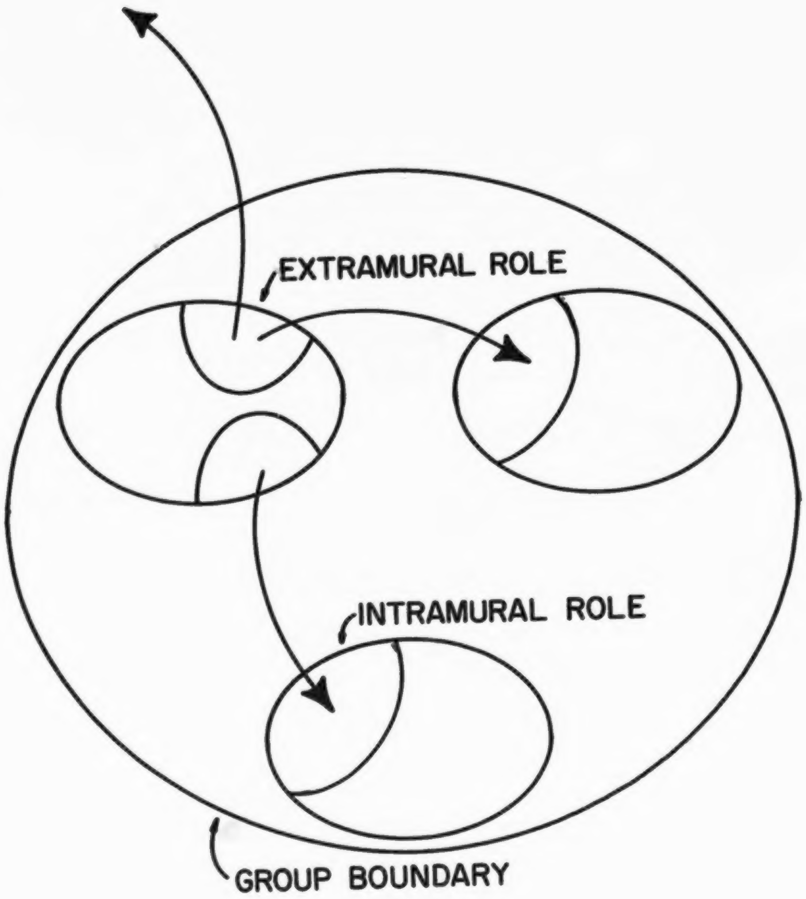
EXTRAMURAL ROLE
INTRAMURAL ROLE
GROUP BOUNDARY

FIGURE 13

of it. Still other occupations may consist primarily of positions containing virtually no extramural roles. For example, the machinist within a given machine shop, in a factory, may have roles that are almost entirely intramural in nature. Similarly, the typist in a typing pool may have a job with few extramural roles included.

It is quite probable that occupations whose typical job structures contain large numbers of extramural roles call for a different kind of person than do those occupations that do not contain such roles. It is also probable that occupations containing large numbers of extramural roles are more exposed to conflict, since extramural roles will result very frequently in the person being involved in conjunctive relationships that are potentially more conflict-laden than reciprocal relationships.

Since this seems true, persons with high levels of tolerance for conflict will probably be more successful in performing occupational roles of an extramural sort than those with a low tolerance for conflict. The salesman, able to stand a certain degree of tension and strain involved in selling a product to a customer, who may not be enthusiastically interested in the product, is a good example. In this case, a person who is overly sensitive to the feelings of the customer, who identifies with him, who cannot stand the disapproval of others or is too thin-skinned, will probably make a terrible salesman when compared to a person with opposite traits.

It would be useful, for such reasons as those mentioned, to be able to classify occupations according to the degree to which they involve intramural-extramural roles. It would then be possible to determine what affect the presence or absence of such roles have on the willingness of people to fulfill occupational obligations or on their success in fulfilling such obligations.

Span of Association

There is another way of classifying roles that is related to their place in the network of social relationships. Some roles are highly particularistic in that they have a single alter role associated with them. Others, in contrast, are performed toward large numbers of people. This can be seen by comparing the role of the father-husband in a family as provider, a role performed toward wife and children, to the same person's role as sex partner, a role performed only toward the wife.

Roles that have only a single alter role in a single other position in a group structure are called unilateral roles, and those with many alter roles in many positions within the group structure are called multilateral. A third term, omnilateral, may be applied to a role which has an alter role in every position in a given group structure. (See Figure 14.) In a shop in a factory, for example, the supervisor has an authority role that is omnilateral with respect to all other members of his particular shop. He is their superordinate and performs the supervisor role with respect to every member in the group. Each of their positions contains a subordinate or supervisee role. The supervisor's role is therefore omnilateral.

Some occupations involve roles performed toward very large numbers of people. They are such that the same role is performed toward the

SPAN OF ROLE ASSOCIATION

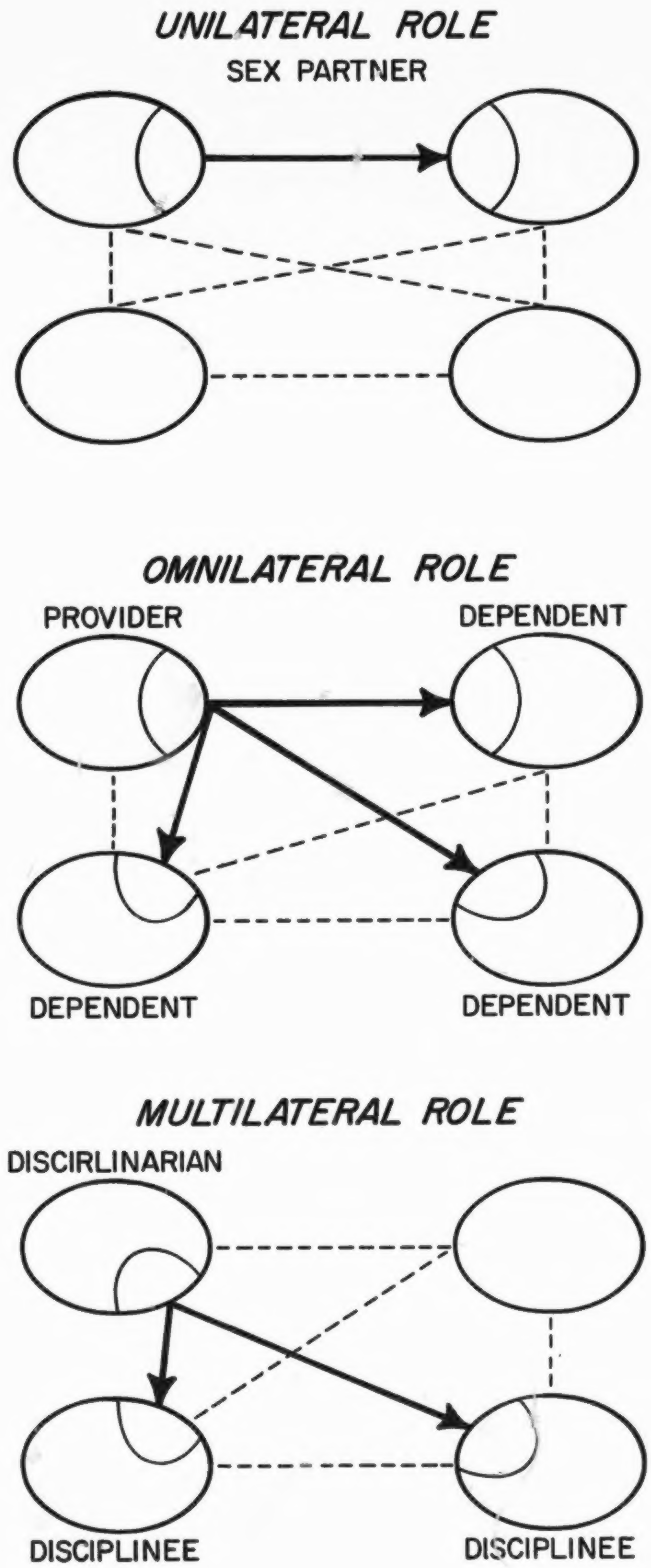
UNILATERAL ROLE
SEX PARTNER
OMNILATERAL ROLE
PROVIDER
DEPENDENT
DEPENDENT
DEPENDENT
MULTILATERAL ROLE
DISCIRLINARIAN
DISCIPLINEE
DISCIPLINEE

FIGURE 14

occupants of many positions within the structure of the organization or the community in which the role is located. For example, the occupation of physician contains the role of diagnostician. This role is performed toward myriad patients. In contrast, a secretary may have a role of typist that she performs for only one person within the organization, her boss.

The degree to which omnilateral, multilateral, and unilateral roles are included within the structure of occupational situses is an important way of classifying and contrasting occupations. It is a measure of the degree to which the occupational practitioner is involved in a number of relationships. Like the pattern of activity and the orientation toward group boundaries, _the span of association_ is probably related to the kind of person who best fits an occupation and to the way in which this occupation is exposed to conflict or stress.

Dominance

Another way of looking at the roles that go into making up the positions that comprise the structure of an occupational situs is in terms of the _dominance_ or _recessiveness_ of roles within the system. A _dominant role_ is one that is considered highly important and valuable by persons in the society within which the occupation is included. In a sense, it is the _key role_ around which the rest of the occupation is organized. It is the core of the occupational situs structure. If we were to examine the position of secretary, for example, we might find that the role of typist is dominant over other roles such as file clerk, receptionist, telephone operator, and so forth.

One way of determining dominance is to study the values placed on various roles by members of the system. Another way is to place the individuals who perform the occupational roles in a situation of stress where they will not be able to perform all of their roles but must decide which one will be performed. The role that is maintained and performed under stress, while others are pushed into the background, will be the dominant role. College professors, for example, may fail to appear at committee meetings, answer their mail, engage in scholarly writing and research, but still maintain their roles as teachers or lecturers within the classroom as stress is introduced into their situation. This would mean their teaching roles are dominant over others. In other words, the dominant role is the last one to be given up when the person is forced by pressures of time, health, or other considerations to curtail activities and to select among various responsibilities the one which will be met.

Since dominant roles are highly valued and are resistant to being forced into continual latency, it is likely that other roles will change or adapt to them. Similarly, if a change occurs in a dominant role, it is likely that changes will occur in other roles within the same occupation ever more quickly and perhaps with greater ease. It is usually the dominant role by which an occupation is known. In other words, occupational titles frequently identify the key or dominant role within the repertoire of roles assigned to a given person. In fact, the dominant role may be the reason for the existence of the occupational situs, the function that organizations seek to have performed by employing members of an occupational category.

If we were to examine the structure of dominant roles in terms of the other variables listed above, it might be particularly instructive concerning such things as change processes in the occupation or in the processes of selection of personalities for filling occupational roles. For example, we can talk about dominant roles in terms of activity-latency or in terms of whether they are extramural or intramural roles, unilateral or multilateral roles, and use the same reasoning employed above.

Summary of Structural Role Dimensions

The four ways of classifying roles discussed in this chapter offer a means of conducting comparative occupational studies using a role theory approach. Such categories enable us to classify occupations systematically, using variables that can be applied to every occupation no matter what its content. This should make it easier to study such things as the relationship between (1) personality and occupational structure, (2) occupational structure and role conflict, and (3) occupational structure and social change.

There are a number of other variables that need to be examined with respect to occupations. They do not allow us to classify roles but, instead, they point to variables that can be combined with those listed above in the examination of occupational structure. Some are related to the content of roles, others to the situation within which roles are performed, and still others to the characteristics of the role performer associated with the occupational situs. These characteristics will be discussed in the following chapters.

CHAPTER VI

KEY INDEPENDENT VARIABLES AND THEIR RELATIONSHIP TO OCCUPATIONAL STRUCTURE

Occupational behavior, like all other human behavior, may be viewed in terms of the factors that act as causes or independent variables with respect to it. The four groups of variables mentioned earlier are generally agreed upon by sociologists. They are (1) the cultural variable, (2) the personality variable, (3) the situational variable, and (4) the social interaction variable. Occupations may be compared and analyzed by using various aspects of each one of these variables as a frame of reference. In this chapter, a brief discussion of the application of each variable group to the study of occupations will be given.

The Cultural Variable

The norms that comprise roles which in turn form the positions and ultimately the structure of an occupational situs represent the culture of an occupation. In other words, occupations have subcultures that take the form of occupational norms. These norms define roles for the actors who engage in the occupation and thereby establish relationship systems into which the occupations fit. One way in which occupations can be compared, therefore, is by examining the contents and organization of the occupational subculture. Talcott Parsons, in his insightful analysis of professions through the use of patterned variables, points to one approach for comparing occupational subculture.[9] Parsons lists and defines five separate "patterned variables" that provide a means of classifying the content of occupational roles. By using these patterned variables, Parsons is able to point out key differences between professional and nonprofessional occupations. The patterned variables, therefore, represent a valuable means of examining the occupational culture in terms of its content.

Other schemes have been suggested for comparing the content of occupational culture. For example, one might examine the expected behavior associated with an occupation in terms of the kinds of objects manipulated by the person in performing the occupation. A three-way classification suggests itself. Some occupations are centered around manipulating persons as the objects on which the occupational behavior is primarily performed. In other words, when the dominant role in the occupation is examined, it will be found that it calls for the manipulation of people in one way or another. Supervisory and managerial occupations fall into this category. Other occupations have as their dominant role one that deals primarily with the manipulation of symbols, and still others with physical objects. Such a classification scheme has obvious faults since most occupations require a mixture of manipulation of persons, symbols, and objects in playing occupational roles. It is valuable, however, to compare occupations in terms of which one of these types of object manipulation predominate since this will have significance in choosing the kind of person who will fit an occupation and the kind of training and background that is appropriate to occupational socialization.

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[9] Talcott Parsons, The Social System, New York: The Free Press, 1964, pp. 58-67; Talcott Parsons and Edward A. Shils, "Values, Motives and Systems of Action," in Toward a General Theory of Action, New York: Harper and Row, 1962, pp. 76-88.

Another way of looking at the subculture of an occupation is in terms of the complexity of the norms and the difficulty involved in their acquisition. Occupations differ in the amount of time required to learn the occupational norms and to become competent in their performance. When one speaks of differences in the amount of education or training required to prepare for an occupation, he is pointing to a quality of the occupational culture, namely, the complexity involved within it. These illustrations point out the fact that occupations may be compared and analyzed using any quality or attribute of culture that may afford a generalizable standard around which to organize comparisons. We will now proceed to another key variable and its relation to occupational structure.

The Personality Variable

In the discussion above, a number of references have been made to the fact that different personality types are suited to different kinds of occupational situses. This hypothesis needs to be made explicit and examined in terms of how it can be used in studying occupations. It is based on the general notion that any set of role expectations places requirements on the actor to perform a certain kind of behavior in a social system. Roles vary widely in the kind of behavior required, and, therefore, place variable requirements on an actor who is expected to fulfill them. It seems reasonable then to assume that each role has an ideal set of personality traits that would fit it best. If this is true, it should also be true that a given occupational situs must be matched with a certain type of personality if full efficiency in occupational behavior is to be achieved.

The best fit between personality and occupations occurs when the least amount of stress is placed on the actor as he performs occupational role behavior. This can be illustrated by a simple example such as that of the salesman occupation. It seems obvious that the requirements of the salesman's roles are such that a person who is extremely shy and retiring would have difficulty fulfilling the role expectations and would experience stress when trying to do so. Similarly, an occupation such as lighthouse-keeper would not be well-suited to an individual who is extremely gregarious and sociable.

If this kind of hypothesis makes sense, it would be profitable to compare occupations in terms of the types of personality traits required to fulfill occupational roles to the maximum degree of efficiency. To do this it would be necessary to identify and classify key occupational traits that have significance for differentiating the kinds of persons needed to fulfill work roles.

Some attributes of occupations that might have great significance for the personality types required are the attributes of authority, span of association, repetitiveness and regularity of the work. By authority, we mean the amount of authority the person who performs the occupation exercises over others or experiences as a subordinate in a system of authority. By span of association, we mean the amount and kind of contacts he has with other people in performing the occupational role. By regularity and repetitiveness, we have in mind the notion that routine, repetitive, tedious jobs differ markedly from less structured occupations and may suit different personality types.

Another way of looking at the personality variable as it is related to occupation is in terms of the kind of person who normally is expected to fulfill the job. This can be analyzed in terms of such traditional categories as sex, age, social class, race, and ethnic origin.

Certain occupations are classified in terms of the type of social identity the individual who performs the occupation is required to have. Some occupations are typically female, while others are typically male. Similarly, occupations are graded in terms of the age expected of the person who fulfills the occupational roles. Some are young men's occupations, others are middle-aged, and still others old men's occupations. In the same way, occupations are often tied to social class origin and to ethnic and racial specifications. By tying occupation to the type of social identity required of the person to fulfill it, the social system assumes a certain combination of experiences and traits to be present in the actor assigned to the occupational role. This is true if individuals in the same category have experienced similar socialization, and as a result have formed a similar social identity.

The Situational Variable

Occupational work situations may be contrasted in a number of ways. Some of the most fruitful ways of looking at the occupational situation can be described in terms of the following characteristics: (1) work location, (2) objects present in the work situation, (3) characteristics of the work situation, and (4) temporal characteristics of the work situation. Each one of these variables will be discussed briefly below.

Work Location

Occupations vary tremendously in the kind of work location associated with them. Some are associated with highly specific and restricted work environments, while others have extremely diffuse and ill-defined spatial locations. For example, a production line job in a factory normally is tied to a few square feet of space within a factory building. Within this work location, the dominant role assigned to the worker is performed day in and day out during long spans of time. In contrast, other occupations have extremely large and diffuse work locations. One example is the farmer who works not only in the fields and buildings located within the boundaries of the farm, but carries on work activity with respect to feed and fertilizer dealers in town, market outlets located in other places, and so forth. Between these two extremes lies an infinite gradation in size and diffuseness of work location. Traveling salesmen, transportation workers such as airplane pilots, locomotive engineers, and truck drivers, professional athletes and theatrical performers all have extremely diffuse work locations. They move around freely within a large environmental setting. In contrast, factory workers in production line organizations; office workers; and most sales personnel in department stores, grocery, drug, and other retail outlets have relatively restricted work locations.

It is probable that freedom to move about in the work location is an extremely important factor in the relationship between personality characteristics and occupational types. Work locations are also extremely important to the study of supervision and authority as it relates to work behavior. The characteristics of communications patterns as they relate to occupational behavior are also profoundly influenced by the characteristics of the work location. Obviously, close supervision is most easily performed over occupations with fixed and restricted work locations. Similarly, communication among people in restricted and fixed work settings is probably easier than in diffuse settings. If these two things are true, then persons with highly diffuse and mobile work locations probably have certain personality characteristics that compensate for the difficulties involved in the use of authority to direct behavior, or in the use of communications to maintain coordination among people.

Another thing needs to be said about the work location. Some persons' work locations are found entirely within the confines of geographic space dominated by a single organization. They work in a building owned by the company or on the ground controlled by the organization. Other occupational groups are merely headquartered within such locations and perform their occupational behavior in the broader community environment. Sometimes their work is performed within the homes of persons residing in the community, at other times within the territory of another organization as in the case of the salesman calling on a commercial customer. At other times their behavior may take place in relation to public highways or in public buildings or on public grounds. One could classify occupations in terms of whether or not they are headquarters-type occupations or field-type occupations. Headquarters occupations would be those whose work behavior is tied to the territory owned by the company or group in which the occupation exists. Field occupations are those that occur outside of that territory in relation to a clientele. As noted above, field occupations present special problems in maintaining and reinforcing occupational behavior through the use of authority or through communications and socialization processes. The field worker must be able to maintain his behavior independent of immediate surveillance by the organization for which he works.

Some occupational groups, especially in the professional category, carry on occupational behavior within work locations largely owned or controlled by others. For example, doctors carry on a good deal of their occupational behavior in hospitals in which they occupy a special position. They do not own or control the equipment and facilities used in applying their professional skills, yet the organization in which they work does not have direct control over their occupational behavior except insofar as a set of rules and a self-governing procedure may be employed to do so. The trial lawyer occupies a similar position with respect to the courts, and in a less clear and precise sense, the professor occupies a similar position with respect to the university within which he teaches. Examining the work location in terms of its size and diffuseness, and its control in terms or organizations and groups, should prove helpful in understanding the varying problems that exist between different occupational groups in our society.

Objects in the Occupational Situation

Another way of looking at occupational situations is in terms of the objects that are found within work locations. Some work situations are filled with machinery and tools and other inanimate objects that are employed in performing the major roles associated with the occupations being studied. Industrial work locations are obvious examples of this. In contrast, other occupational locations are primarily filled either with living objects, such as animals or plants, or with natural inanimate objects, such as rocks, mountains, rivers, oceans and so forth. Still others are primarily filled with people or with goods that are handled not for the sake of production, but for the sake of distribution. Characteristics of objects in the work situation, aside from having obvious significance for the kinds of persons who might successfully practice the occupation and the kinds of socialization processes necessary to prepare them for it, would probably have significance for the way in which communications can be carried on within the work situation, the way in which authority may be exercised, and the way in which work groups may be organized.

Other Characteristics of the Work Situation

Work situations should also be examined in terms of such factors as level of sound, heat, and light present. Special characteristics of the work situation, such as the presence of hazards from industrial irritants, high levels of odor, radiation, lack of oxygen or other possible factors in the work situation, need to be examined in comparing one job with another. These factors will have significant effects on career patterns, on recruitment of persons for the occupations, on levels of satisfacton that persons have with their work experience, on levels of pay demanded by persons in different occupational groups, and so forth. In other words, special characteristics of the work situation that differentiate it from the normal living environment in which human beings expect to operate are important in the study of occupations.

Time and the Work Situation

It is almost too obvious to note the fact that all occupations do not operate on the same time schedule. Some are day occupations, and others night-time occupations. Some have seasonal significance, such as fishing or farming. Others are quite diffuse, in terms of time, having no exact time relationships. The length of the work day and the work week, and of the annual cycle and the career cycle involved in an occupation, are extremely important in a number of respects. Since time, in a sense, is a situational variable, it is mentioned here in addition to its relationships to the activity-latency cycle associated with occupations.

In summary, it can be said that every occupation has a set of situational characteristics within which the occupational behavior is carried on. Occupational situations vary tremendously and need to be understood fully before many social characteristics of occupations and characteristics of occupational culture can be understood. To study occupations without studying the occupational situation is to ignore the real stage upon which role behavior is acted out. The stage setting is as important to the drama of occupational behavior as the script that is represented by the role expectations contained within the occupational culture.

Interactional Characteristics of Occupations

The fourth variable that needs to be examined carefully in the study of occupations is that of social interaction. All occupations are involved in a network of social relationships in which the occupational practitioner plays roles toward other people in interactional processes. Without such connections to the social systems through interpersonal relations, occupational behavior would necessarily be self-directed and could not have significance in terms of the social system. In other words, in order for the product produced by a person who performs occupational behavior to be transferred to, and utilized by, other members of the social system within which the occupation exists, the persons occupying occupational positions must be linked to a system of social relationships. It is through this system of relationships that occupational products or outputs begin to flow through the larger social system.

It is almost inevitable in a society such as ours, with a materialistic orientation, to see work behavior more in terms of concrete skills performed in relation to material objects using machines and tools, than to see it in terms of the system of social relationships through which such behavior is performed. For example, in viewing the occupation of automobile mechanic, it is almost irresistible for us to think of the occupation in terms of the use of tools in relation to work on a machine. However, the automobile mechanic, in using his tools and in working on machines, must relate his behavior to other human beings. Sometimes he will relate to the foreman of a shop or to other mechanics. At other times he must act toward customers, parts clerks, and so forth. All of these relationships must be viewed as a part of his occupational behavior and must be given weight in examining the characteristics of his occupation with respect to those behaviors performed strictly toward objects.

It has been long recognized, with respect to professions such as medicine, law, teaching, social work and the ministry, that a large component of occupational behavior is involved in social relationships with people. This is inevitably perceived because all professions in some respects deal with people as objects of occupational behavior. In the case of non-professional occupations such as automobile mechanic, plumber, welder, machinist, factory worker, etc., little attention has been given to the interactional or social relationship component of occupational behavior. It is probably also true that occupational training in such places as vocational schools, or in apprenticeship programs, is focused upon transmitting physical skills in manipulating physical objects, and little attention is given to the social dimension of occupational behavior. It is nevertheless true that every occupation involves the social relationship component without which it would have no meaning in a social system. Since this is true, it would be useful to have a classification scheme for categorizing occupations in terms of how they fit into social relationship systems.

One way to begin to formulate such a classification scheme is to examine the dominant role around which the occupational situs is built, in terms of its relationship to the interaction variable. For example, the dominant roles of some occupations are directed toward inanimate objects. The primary behavior involved in performing such an occupational role is toward objects other than human beings. Thus, the mechanic works on the automobile in performing his dominant role. In contrast, the physician directs his occupational behavior toward a person. As a consequence, the dominant roles of the two individuals fit into relationship systems in a different way. The mechanic enters social relationships only in terms of "recessive roles" contained within his occupational structure. These roles exist to facilitate the performance of a dominant role rather than to serve as the central focus of occupational behavior. In contrast, the doctor's dominant role is organized around behavior toward another human being. Recessive roles within his occupational situs may be related to the use of objects.

Another approach to classifying interactional characteristics of occupations would be in terms of whether the occupational behavior is performed primarily within a work group or primarily as a solitary work practitioner. The occupation of secretary is almost always included within a work group that contains at least one other person. As a consequence, the secretarial occupation is constantly involved in interactions with other people in a group setting. In contrast, the occupation of sculptor or artist may be performed by a solitary individual. For such persons, occupational behavior is being carried on alone most of the time and only occasionally does the practitioner become involved in group situations.

Another way to contrast occupations is simply to measure the amount or rate of interaction involved in the daily activities of the workers. Some persons will be in contact with large numbers of individuals during a given work day and will be involved in a constant stream of social interaction with others. Conversely, some occupations will have a very low rate of association during the normal work day.

There are two research methods which can be employed to study the characteristics of occupations in terms of the interaction variable. They are (1) a sociometric contact survey, and (2) a standard social participation survey. In the first, an effort is made to determine the number of contacts a person is involved with during a given interval of time, say a work day, week or a month. The techniques suggested by Weiss in Processes of Organization can be employed to accomplish this.[10]

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[10] Robert Weiss, Processes of Organization, Ann Arbor, Michigan: University of Michigan, 1956, pp. 88-108.

The standard social participation surveys, such as those employed originally by Chapin and modified by others, present an opportunity to study the organizational participation of occupational practitioners.[11] These surveys normally focus attention upon voluntary organizations, such as civic clubs or civic organizations. However, with little modification, the same technique can be employed in studying the participation of an individual in various kinds of work group settings as well as in the type of voluntary association studied by followers of Chapin.

Summary

Occupational behaviors may be viewed as a result of a number of variables that operate on the person engaged in occupational behavior as causative or independent variables. It was suggested that four variables --culture, personality, situation, and interaction--have determining effects on occupational behavior. This statement may be interpreted as follows. Each occupation has a set of norms associated with it that specify the kinds of behavior expected of occupational practitioners in performing roles. This occupational culture may be described in terms of norms, roles, positions, situses, and finally, in terms of the relationship of the occupational situs to the total station of the person in society. This is possible because these concepts have been designed to permit description of culture or cultural structures, starting at the normative level and building up to more and more complex levels of cultural structure. A person who engages in an occupation, then, is viewed as having learned the occupational culture in the form of occupational roles and behavior required in a work situation and may be seen as carrying out the norms contained within his occupational culture.

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[11] F. Stuart Chapin, Experimental Designs in Sociological Research, New York: Harper and Row, 1955, pp. 275-278.

Each worker, however, has his own unique set of personality traits which contribute to the behavior he performs in a work situation. These traits interact with the occupational culture to influence the behavior which results.

Each worker may be viewed as performing occupational behavior in a work situation that has been shaped by the culture of his society and to which he reacts as a personality. Finally, in the work situation he interacts with other human beings who have also learned occupational cultures, have distinct personalities, and perceive the work situation in a different fashion. Thus, occupational behavior may be seen as a result of the interplay between these four variables which act as causative influences on work behavior.

Since these four variables are causative with respect to occupational behavior, they may be used, when broken down into sub-categories of variables, to contrast and compare occupations with respect to the effects of the four independent variable groups. What we are saying is that culture, personality, situation and interaction do not apply in exactly the same way to every occupation, but form unique combinations with respect to each one. As a consequence, these four variables may be used as a framework for creating systems for the comparison and analysis of occupational structure and occupational behavior. The utility of the four-variable scheme outlined above can perhaps best be illustrated in the next chapter, where the stresses and strains that are associated with occupational behavior will be analyzed in terms of these four variables.

CHAPTER VII

OCCUPATIONAL ROLE STRESSES[12]

The four variables, sociocultural structure, personality, situation and interaction, may be viewed as a system of interrelated variables that, acting simultaneously and in relation to one another, are causal with respect to human behavior. If each one of these variables contains elements which are internally consistent, and if each variable is related to the other in a consistent fashion, human behavior may be viewed as stress-free. Stress or strain in human behavior arises when one of two conditions occur with respect to the system of variables mentioned above: (1) when the elements that are contained within the structure of the variables become internally disorganized or inconsistent, or (2) when the contents of one variable become inconsistent with the contents or operation of the other variables. Under the first condition, the contents of culture may become disorganized or internally inconsistent. Thus, the various norms that comprise the sociocultural variable may come into conflict with one another. Similarly, within the personality variable, the various traits that form the personality system may be internally inconsistent or in conflict. In the case of the situational variable, the various objects or elements within the situation may become disorganized, while in the case of social interaction, interpersonal conflict may arise. In the case of the second condition, the contents of culture may come into conflict with the personalities of the individuals expected to to carry out the normative expectations contained within the culture. Similarly, the sociocultural structure may not match the situation to which it applies. Finally, the characteristics of the interaction process may not correspond to the expectations contained within the culture. Thus, stress arises within the system when the elements that form each of the independent variables become internally disorganized, or when the different variables comprising the system of variables become inconsistent with one another.

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[12] Harold L. Nix and Frederick L. Bates, "Occupational Role Stresses: A Structural Approach," Rural Sociology, 27 (March, 1962), pp. 7-17.

Following this reasoning, it is possible to identify several forms of role stress which may arise in social systems. Since occupations have been defined in terms of systems of roles, examination of the types of stress which may arise in role relationships will be valuable in examining occupational stress and strain.

There are five distinct types of role stress that can be identified and defined using the model outlined above. They are (1) role conflict, (2) role inadequacy, (3) role frustration, (4) role nonreciprocity, and (5) role superfluity or saturation. Each one of these forms of role stress will be discussed in the paragraphs below.

Role Conflict

Definitions

The sociocultural structure variable consists of social norms, at its most microscopic level. It will be remembered that these norms form clusters called roles. It has been postulated that within a given role there exists a strain toward consistency among the various norms comprising the role. Despite the existence of a strain toward consistency among the contents of a role, norms are not always internally consistent with each other. When two norms call for behaviors that are inconsistent with each other, a condition known as role conflict exists.

Role conflict, then, is a condition of stress within the socio-cultural structure of a social system. It involves inconsistency or conflict between and among various norms comprising that system. When a person tries to perform the behavior called for by the role, he finds himself in a situation where one of the following is true: (1) his behavior is perceived by himself or by others as being inconsistent, (2) behavior performed in conformity to one of the norms defeats or negates behavior performed in conformity to another norm contained within the person's roles, or (3) the same person is expected by different alters or groups of alters to perform behavior which conforms to one of the two conditions stated previously.

Some illustrations from the field of occupations will aid in understanding the condition of role conflict. The case of the traveling salesman affords an opportunity to illustrate this concept. Let us suppose that the traveling salesman's occupation requires him to spend a great deal of time away from home, traveling around the country performing occupational roles. In other words, the norms contained within his occupational roles require him to spend large amounts of time away from his family. Let us suppose the traveling salesman is married and has several children. The norms contained within the structure of the family system call for his spending time with his wife and children, performing various kinds of roles toward them. A man attempting to fulfill the two sets of expectations finds that they are inconsistent with each other. If he conforms to work norms, he violates expectations of the family. If he conforms to family norms, he violates expectations contained within his occupational roles. He is therefore in a situation of role conflict.

The case of the college professor may also offer an illustration of role conflict of a different sort. Let us assume that the college professor has a role of educator or teacher contained within his occupational position. At the same time, his position contains other roles, for example, that of evaluator or examiner. When we study his occupational behavior and examine the norms contained within these two roles, however, we discover that the norms calling for various forms of tests and examinations result in the professor performing behavior which negates or counteracts his efforts to act as a teacher or instructor to his students. If he conforms to his examiner roles in an ideal fashion, his effectiveness as a teacher is lost. If he conforms to his role as teacher, his effectiveness as an examiner is lost. In other words, his two roles contain normative inconsistencies that result in behavior which is self-defeating. This would also be classified as role conflict.

Prediction of Role Conflict

A number of propositions can be stated about the likelihood of role conflict occuring within occupational roles and about the severity of conflict with respect to actors. Role conflict involves inconsistencies among the contents of role. It seems reasonable to assume, therefore, that the more roles contained within an occupational situs, the more likely the situs is to contain instances of role conflict. That is to say, the more complex an occupation is, and the more roles a person is required to perform in order to fulfill occupational expectations, the more likely he is to be exposed to role conflict. This proposition is based on the simple assumption that the more roles there are, the more chance there is for inconsistencies to arise among contents. Similarly, we could say that the more norms contained within a given role, the greater is the likelihood for that role to contain conflicts.

Another proposition that can be stated about role conflict is as follows: role conflict is more likely to be perceived by the actor performing the roles if the norms that are in conflict are close to each other structurally, than if they are far apart. Thus, we can state that the severity of role conflict probably varies inversely with structural distance among the elements in conflict. Two norms calling for behavior performed toward the same person, in the same situation, in a short span of time, are more likely to be perceived by the actor as conflicting. They are also more likely to bring about interpersonal conflict when the use of social sanctions or social controls arise to produce role conformity.

It seems reasonable to assume that the more complex an occupational situs is in terms of the number of roles it contains and the number of positions these form in different group structures, the greater will the structural distance be among positions forming the situs. In other words, in very complex occupational situses, a great deal of structural distance will separate one role from another. This will be true since the situs will contain a large number of positions and each position will be contained within a different group structure. Some of these groups will be located in one organization, others in another organization. It is even possible that one position will be contained within an organization in one community and another in a different organization in a different community. In such occupational situses, a large amount of internal inconsistency or role conflict is apt to arise among the various parts of the occupational situs. However, according to the last proposition, it is likely that actors with extremely complex situses, in which large structural distances are present, will not perceive a good bit of the inconsistency or role conflict contained within various parts of their occupational situs. They are most likely to perceive the role conflict that exists among elements close to each other in structural distance.

The Consequences of Role Conflict

A word needs to be said about the consequences of role conflict for the actors who experience it and for the system within which it takes place. Each form of role stress which will be discussed below, including role conflict, has two different kinds of effects. The first is on the personality system of the individual who occupies the positions and performs the roles that are in conflict. The second kind of effect is on the functioning of the system within which the actor plays the conflicting roles. We can call these the psychological and social consequences of this form of stress.

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In order for the psychological consequences of role conflict to occur, the actor performing the role must perceive the inconsistency or conflict. He must, in other words, be aware that the behavior expectations that apply to him are (1) logically or morally inconsistent, and (2) call for self-defeating or mutually exclusive behavior. When the actor perceives the inconsistency, or role conflict, one of a number of psychological consequences will occur. He will feel guilt, anxiety, fear, frustration, or anger. Each one of these emotions is punishing to the individual experiencing it and leads to efforts on his part to eliminate the emotion state and to establish some form of consistency in the normative system that applies to him so that the punishing effects of the emotions are reduced.

States like guilt, fear, and anxiety can be traced to reward, punishment, and reinforcement experiences the individual has had in interpersonal relations with others. In other words, when a person perceives an inconsistency in behavioral expectations, he is led to anticipate sanctioning behavior on the part of others who hold the expectations toward him. He expects alter actors to use some form of social sanction or social control to enforce expectations. Socialization may lead the actor to anticipate this and to feel the emotions of anxiety or even fear.

It has been noted that the actor must perceive the inconsistency in some way in order to experience the consequences of the conflict. We are hypothesizing that an actor will perceive the inconsistency when the behaviors called for occur close together in social, physical, and temporal space. In other words, when the two behaviors are performed toward the same actor in the same situation, he is much more likely to perceive the inconsistency than when they are performed toward two different actors in two totally different situations separated by a considerable time lapse. Furthermore, it can be said that alter actors may perceive the lack of consistency in the behavior of a person under the same conditions. That is, if inconsistent behaviors are performed toward the same alter in the same situation close to each other in time, the alter actor is apt to perceive the inconsistency, and, through his behavior, cause the ego actor to perceive it. If, however, the behaviors are performed toward two different persons in totally different situations, the alter actors must themselves interact with each other, or perceive the interaction of ego with the other alter, before such perception can take place. On this basis, it is believed that the closer together two norms are in social space, the more likely the actor is to perceive the conflict and to be immediately punished by experiencing it. This discussion of the characteristics of work situations and of interaction patterns as they apply to occupations should have pertenence to this theory of role conflict.

It is probably true that different personality types have a greater or lesser tolerance for role conflict. If this is true, then tolerance for such conflict may become an important selection criterion for those occupations that involve a high degree of exposure to this form of stress. This leads us into a discussion of the next type of conflict or stress.

Role Inadequacy

Definitions

Several times, in previous paragraphs, the hypothesis has been suggested that each combination of roles that form situses has a type of personality system that best fits it. That is to say, for each set of roles that form a situs or station, there is a type of personality system that can perform the roles with the least amount of inconsistency with personality traits. This is not to say that for every conceivable system of roles that form an occupational situs there is a personality type that would experience no stress at all, but rather to say that a given personality type will minimize stress with respect to a given occupation. When the role requirements contained within an occupational position are consistent with the personality traits possessed by the actor assigned to the position, no stress exists. When, however, there is a lack of correspondence between personality traits and role requirements, a condition known as role inadequacy exists. Role inadequacy, therefore, represents a conflict between the sociocultural variable and the personality variable as they relate to the causation of human behavior. This kind of role stress takes a number of forms. First, the character traits or personality characteristics of an individual may not correspond to the kind of behavior required of him by his roles. Let us say, for example, that a given person is very submissive, shy, and retiring, but he is assigned to a supervisory role in an organization that requires him to give orders and directions to other people, and to exercise disciplinary action with respect to them. The requirements of his occupational role seem, therefore, to be inconsistent with the personality or character of the actor.

Another form of role inadequacy, rather than involving the character traits of the individual, might involve the socialization of the individual in terms of his occupation. He may be assigned technical roles for which he has not been prepared through socialization. Thus, he is incompetent. In this case, inadequacy takes the form not of a conflict between his personal character and the requirements of the role, but between his experience and background and the contents of his role.

Role inadequacy may take still another form. Consider a case in which a person with a high degree of intelligence and ambition is assigned a menial task to perform. In this case, the individual may be over-socialized for the particular requirements of his job, rather than under-socialized for them, and role inadequacy arises out of a mismatching of the individual's capacities with the requirements of his job.

Occupational Recruitment, Socialization and Role Inadequacy

Recruitment procedures in the field of occupations and in socialization practices are designed to reduce the likelihood of role inadequacy. In another respect, occupational mobility, or movement from lower to higher echelons of occupational accomplishment, is designed to overcome or reduce the likelihood of role inadequacy.

As in the case of role conflict, the stress of role-inadequacy has both personal and social consequences. When the individual perceives himself as being inadequate with respect to the roles assigned to him, he may suffer the same kinds of emotions mentioned with respect to role conflict. Shame, guilt, anxiety, fear of loss of status, and so forth, may be the result of this form of stress. Similarly, the social system in which the person is assigned roles may suffer from partial or incomplete role performance. When such incomplete or inadequate role performance exists, the output of the work group's product or function will be impaired.

Role Frustration

A third form of role stress may be entitled role frustration. It occurs when the situation in which roles are performed contains elements that prevent or impair role performance, or where the situation lacks the proper objects to facilitate role performance.

Every role consists of a set of norms that call for behavior on the part of an actor in a situation. Roles normally assume a certain situation content and structure in which the behavior takes place. In other words, the role definition assumes that certain objects are present in certain relationships to each other. For example, the housewife's role as cook presumes the presence of a stove, pots and pans, a water supply, light, and various other situational components which are used as facilities or tools and equipment on the stage upon which the "cook" role is performed. If any one of these objects is missing, for example, if the stove malfunctions or is not present, then the performance of the role is affected. It may be prevented entirely, delayed, or impaired. In the case of role frustration, we assume that the individual has learned the normative contents of the role, that these contents are internally consistent, and that the person's personality matches the requirements of the role, but that elements in the situation prevent the performance of it.

Role frustration has obvious implications for the study of occupations. Occupational behavior normally presumes, in a society such as ours, the existence and operation of various occupational paraphernalia in the situation. In order for a person to perform his occupation, he must have access to situations that contain the supporting elements that make role performance possible. The trained machinist can only act out his role as machinist if he has access to a machine shop containing the proper tools and equipment to perform his trade. Breakdown in equipment, or changes in its character, may frustrate role performance. As a matter of fact, unemployment itself may be seen as lack of access to a situation within which occupational roles can be applied.

Role frustration is probably more likely to occur in certain occupations than others. It would seem reasonable to assume that the more complex the situation is, within which occupational roles must be performed, the more likely an actor is to experience role frustration. Indeed, it can be noted that certain occupations concern themselves with creating and maintaining situations within which other occupations may be carried out. For example, persons who repair and maintain machinery, and those who control heat, light, sound levels and so forth, have occupations related to maintaining situations within which others perform their work.

Disasters and crises such as fires, explosions, and so forth, provide insights into the effects of situational disorganization on role behavior. Situational elements are destroyed or damaged and disorganized in disasters and crises, and therefore role frustration occurs. Behavior immediately following disasters, both small and large, is generally devoted to restoring the physical situation to a state where role behavior may be resumed.

Role frustration also results in personal and social consequences. It is probably true that the typical emotional response to role frustration is anger or aggression, rather than fear or anxiety. As already pointed out, this kind of stress results in impairment of role behavior and, therefore, affects the output of the system function.

Role Nonreciprocity

Role conflict occurs when two norms that apply to the behavior of the *same* actor are inconsistent with each other. That is, when the *same* person is expected to perform two behaviors that are in conflict, we have the condition known as role conflict. A different kind of stress arises when the norms contained within a role assigned to one person do not correspond, or are inconsistent, with those assigned to another person with whom he interacts. This kind of stress we will call role nonreciprocity. In other words, in role nonreciprocity, two norms assigned to different actors are not reciprocal to each other. Instead, they call for behavior which is either logically or morally inconsistent with respect to the accomplishment of a common function, or in which the behaviors defeat each other as in the case of role conflict.

Thus, nonreciprocity would exist if the norms that call for behavior on the part of the lecturer do not correspond to the norms calling for behavior on the part of students in the classroom. Suppose, for example, students were permitted to talk whenever the mood hit them so that they would be permitted to converse with each other interrupting the lecturer whenever they wanted to. On the other hand, the lecturer is expected to present a consistent, logically developed set of ideas to an audience who in turn is expected to absorb the ideas through listening. The behaviors in this case would be internally inconsistent, and role nonreciprocity would occur.

When this kind of stress arises, the result is usually interpersonal conflict. That is, the individuals, in trying to perform their roles, come into conflict with each other and an interpersonal disagreement of some sort arises. Nonreciprocity may arise when two actors are given the same function to perform and when the same rights and duties are understood to apply to both. That is, if both individuals are given the right to give each other orders and instructions and to supervise the work of the other, we would have a condition of nonreciprocity. The most common condition under which nonreciprocity is observed is the case in which two actors define the same roles differently. For example, the wife's definition of what the husband's roles are in the family differs from the husband's definition of his own role and vice versa. In other words, a lack of consensus on normative expectations may result in nonreciprocity.

Role Superfluity or Saturation

A final kind of stress needs to be noted. Suppose we were to add new roles to a given occupational situs until we reached the point at which the full time and energy of a given individual were consumed, in other words, until he had no more time or energy to be used in fulfilling additional role expectations. Suppose, however, we go beyond this point and continue to add new roles and new responsibilities to the same person's occupational positions. When the number of expectations exceed the capacity of the normal individual, even if there are no personal inadequacies when each individual expectation is examined, we have a condition known as role superfluity or saturation. An opposite condition exists when the roles assigned to a given person are so easily performed, and so simple, that they do not fill the entire time or utilize the entire capacity of the person. This condition can be called role poverty. Superfluity may be observed in occupational situses high on the scale of occupational prestige, and the opposite condition may be observed in occupations low on the scale of prestige. When superfluity occurs, the individual finds himself in a state where he cannot fulfill all of the role expectations assigned to him. Each one, in and of itself, is considered legitimate and within the capacity of the individual to perform, given unlimited time and energy. However, within the limits of a normal workday and week, during the normal life career of the individual, he must sacrifice performance of some role expectations. The office of President of the United States seems to be a classic example of this kind of role stress. Management and executive positions in general seem to be particularly prone to this form of disorganization.

There are obvious personal and social consequences of role superfluity. It is a condition that normally precedes further differentiation of the system into new occupations or into new subgroups.

Much has been made of the opposite condition to role superfluity in the literature on industrial society. Here, it is noted, many jobs in a production line organization are too repetitive and simple to challenge the capacities of the normal human being. As a consequence, boredom and monotony are experienced by the persons fulfilling the occupational roles. In the writings of some industrial sociologists, starting with Rothlisberger and Dickson in their study of the bank wiring room, this condition is seen as one of the origins of the so-called informal organization within industry.[13] Informal groups are seen as a consequence of the worker's efforts to introduce variety and interest into his work situation. Role superfluity, on the other hand, has been seen as the origin of executive ulcers and cardiac complaints.

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[13] Fritz J. Rothlisberger and William J. Dickson, Management and the Worker, Cambridge, Massachusetts: Harvard University Press, 1939.

CHAPTER VIII

THEORIES OF OCCUPATIONAL RANKING

Occupations are not equal to each other in rank, as measured by different variables. For example, they differ in the amount of power that individuals have over others in the social system in which they exist. Similarly, they are not equal to each other in the amount of income or other rewards a person receives by virtue of performing occupational roles. Finally, they do not have associated with them equal amounts of occupational prestige. Some occupations are respected to a high degree, while others are disdained.

Davis-Moore Functional Theory of Occupational Rank

Many studies have been made in this country and abroad of the rankings of occupations in terms of these variables. Several theories have been advanced to explain the particular variation in occupational ranks that have been observed in these studies. The most famous of these is the theory of Davis and Moore which has been discussed, pro and con, over a number of years in the field of sociology.[14] Davis and Moore in their original consideration of the causes of occupational rank differences stated the hypothesis that occupations vary in social rank according to the importance of the function they perform for the society.

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[14] Kingsley Davis and Wilbert E. Moore, "Some Principles of Stratification," American Sociological Review, 10 (April, 1945), pp. 242-249.

Thus, occupations with high functional importance rank high in other attributes, such as the amount of income afforded the occupational practitioner and the amount of prestige afforded him by members of society. Davis and Moore reasoned that, from the point of view of the social system, it is more essential to fill occupations which are crucial to the functioning of society than to fill those which are less crucial. As a consequence, a system of higher rewards has evolved that has the function of insuring the performance of the most vital functions for the social system.

The difficulty with the Davis-Moore hypothesis, as pointed out by the authors themselves and various critics, has been the measurement of functional importance. How does one establish the functional importance of the occupation of physician in a society, for example, as compared to that of garbage collector? It might be argured that both functions have the effect of maintaining the health of the population and are of equal value.

The way out of this dilemma that has been suggested is to take the ratings of functional importance perceived by members of the system and to revise the hypothesis to state that it is not the real functional importance that counts in occupational rankings, but rather the perceived functional importance vis-a-vis the value system of the society that determines the ranking of an occupation. Thus, if doctors are perceived as being functionally more important by members of society than garbage collectors, they will be rewarded more highly.

The difficulty with this hypothesis is in demonstrating the kinds of social mechanisms that result in the elevation of the rank of one occupation and the depression of the rank of another. What behavior, for example, goes on within the social system that determines the level of rewards received by a doctor, in the form of income, as opposed to the level of rewards received by a garbage collector ?

Supply-Demand Theories of Occupational Rank

Other theories suggest supplements to the Davis-Moore hypothesis and introduce a supply and demand kind of reasoning into occupational rankings. For example, it is pointed out that there are differences in the scarcity of personnel who are able to perform various occupational roles. If we hold the variable of functional importance constant, so that each occupation is regarded as equally important, and then vary only the supply of people, those in scarce supply will receive higher rewards than those in plentiful supply. This theory then necessitates determination of the factors that affect both supply and demand.

Most theoretical arguments to bolster the functional theory have been made on the supply side of this formula. It is reasoned that certain occupations require a long, extended period of training. Persons not only have to go through the public school system, but must enter college and complete graduate or professional training before they are considered on the market. The supply of such people, then, is affected by the length of training required to fulfill occupational roles. It is reasoned that fewer people will voluntarily submit to extended periods of training for an occupation than to shorter periods. Thus, the supply of people is limited. Another argument on the supply side takes the form of special abilities or talents. Thus, professional sports occupations, such as baseball or football, require high levels of physical strength, coordination, and so forth. These qualities are scarce within the population, and, therefore, affect the supply of persons capable of fulfilling role expectations. Intelligence, beauty, strength, courage, and other qualities that are scarce within a human population may be considered to affect the supply of persons available to fulfill occupational roles, and thereby to affect the rewards necessary to induce individuals to enter these occupational positions. Obviously, functional importance and the supply of persons to fulfill jobs vary simultaneously in real societies. Similarly, societies do not have equal demands for all kinds of occupational practitioners.

Power and Occupational Rewards

Still another hypothesis that relates to occupational rank involves a notion of power. This is seen most clearly in Marxist reasoning, where power, in the form of the ability to control relationships between other people and to command their obedience or conformity to expectations, influences the flow of wealth and prestige within the system. Thus, persons with high levels of power may also appropriate high levels of wealth or prestige for themselves. Using this hypothesis, it would be reasoned that certain occupations fit into the structure of society at places where the practitioner has access to power. As a consequence, he will also have access to prestige and income. On this basis, the hypothesis of status congruity and crystallization has been stated.[15] This hypothesis holds that there is a tendency within social systems for the rank of an occupation on the three variables of power, wealth, and prestige to achieve equal status. That is, the level of power, prestige, and income will correspond to each other, so that occupations will be high on all three or low on all three simulanteously, with little independent variation in the three ranking attributes.

Conflict Theory of Occupational Rank

The present writer would like to suggest an alternative hypothesis to be added to those suggested above, as a partial explanation for variation in occupational rankings. This hypothesis can be stated as follows. The rank of an occupation in terms of power, wealth, or prestige varies directly with the exposure of the occupational practitioner to the five forms of role stress outlined earlier. When an occupation is exposed to high levels of role conflict, inadequacy, frustration, nonreciprocity, and superfluity, a high level of rewards in terms of power, wealth and prestige will be necessary to induce a person to fulfill occupational role expectations. The theory is that the five forms of stress provide negative motivations for the individual to withdraw from the occupation and to seek a situation in which the stresses are reduced. In order, therefore, for the actor to be induced to assume the occupational roles and remain in them, high levels of reward will have to be offered as a counter motivation. If one examines the occupational rankings from various studies performed over the last ten or fifteen years, he will discover that those occupations at the top of the occupational ladder also seem to be those with a maximum exposure to role stress, while those at the bottom seem to have a low degree of exposure.

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[15] E. Benoit-Smullyan, "Status, Status Types, and Status Interrelations," American Sociological Review, 9 (April, 1944), pp. 151-161.

Gerhard Lenski, "Social Participation and Status Crystallization," American Sociological Review, 21 (August, 1956), pp. 458-464.

Roland J. Pellegrin and Frederick L. Bates, "Congruity and Incongruity of Status Attributes Within Occupations and Work Positions," Social Forces, 38 (October, 1959), pp. 23-28.

It is porbably true that no single theory can account for occupational rankings. It is undoubtedly necessary to use a combination of the Davis-Moore hypothesis, the role stress hypothesis, the notions of supply and demand, and those of congruity and crystallization to account for variations in occupational rank.[16] The most remarkable thing to be observed in this connection is the fact that repeated studies have shown a rather stable and consistent ranking of occupations in terms of the variables mentioned. This gives us some hope of achieving an adequate theoretical explanation of the observed phenomenon as data accumulates over the next decade or so.

Role Stresses and the Strain Toward Consistency[17]

Earlier in this discussion, it was suggested that a strain toward consistency exists among the various parts of a given occupational situs.

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[16] See Footnotes 14 and 15.

[17] The concept of consistency in human thought, feelings, and belief has an ancient history, being explicitly introduced into sociology

It was further suggested that this strain toward consistency is strongest among the parts of an occupational situs that are structurally closest to each other, and that the source of this strain toward consistency can be found in role stresses. It is now possible to state this theory in a little more detail. First, role stresses are the result of inconsistencies either within the structure of a role or roles, or between roles and other variables such as personality, situation and interaction. Thus, the strain toward consistency amounts to the elimination of role stresses from the social system.

We may visualize the elimination of role stress as follows. Role stresses are punishing to the actor experiencing them and disrupting to the system within which they occur. When an individual experiences the punishing effects of a role stress, it is hypothesized that he will attempt in some way to reduce the stress. In order to do this, he will have to do one of several things. First, he can redefine his roles so that the norms within them are no longer inconsistent internally with

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by William Graham Sumner who stated that folkways were "subject to a strain of consistency with each other." (Folkways, New American Library, New York, 1960, p. 21.)

It was not until the 1950's, however, that widespread interest in the principle of consistency has been evident, primarily in psychology and communications theory. Modern consistency theories, appearing under the various names of balance, congruity, symmetry and dissonance, propose that a person tends to behave in ways that minimize the internal inconsistency among his intrapersonal cognitions, his interpersonal relations, or among his beliefs, feelings and actions.

A good summary and bibliography of consistency theory is: William J. McGuire, "The Current Status of Cognitive Consistency Theories," in Cognitive Consistency, edited by Shel Feldman, Academic Press, New York, 1966, pp. 1-46.

other factors such as his personality, situation or interaction. Second, and least likely, he can change his personality traits in order to conform to role expectations. Third, he can alter the situation in some way, or fourth, he can change the way in which interaction takes place. Any one of these behaviors could reduce the stress within the system.

It is assumed that the actor will go on attempting, through actions of one sort or another, to eliminate stress until he is successful in doing so, or until he withdraws from the occupation. If he succeeds in eliminating stress, he will, for himself at least, have achieved a situation of internal consistency. Within his particular roles, the strain toward consistency will have operated. If a large number of actors experience the same kinds of stress and behave in the way the individual described above behaved over a long period of time, it is hypothesized that they will move toward achieving some common solution to the stress problem. The commonality of the solution will be enchanced by the operation of social control within the social systems where the stress exists, and through the operation of socialization and communication behavior among members. Thus, in the long run, we are able to conceive of the system moving toward, if not ever absolutely achieving, a condition of internal consistency among the various parts. The strain toward consistency among the various parts of an occupational situs is seen as the result of the operation of role stresses and the reaction of actors to such stress.

Stress can also be seen as a potential cause of disruption of the system itself. One can reason that when role stresses occur, negative consequences result for the system. It is disrupted or impaired in some way. This means that actors other than the person experiencing the stress will have difficulty in performing their roles in relation to the person involved in stress. This disruption will result in their applying pressures of one kind or another on the person involved in the stressful behavior. This pressure will take the form of social controls or socializing behavior that, in the short run at least, will have the effect of increasing the stress experienced by the original actor. The other actors' behavior will reinforce the behavior of the actor attempting to eliminate stress from his own situation and cause further movement toward consistency.

Obviously, role stresses must be introduced into a system through changes occuring for one reason or another. Changes in the actors in the situation, in the total culture within which an occupation exists, in the system of relationships that fit the occupation into an interactional context--all these may be sources of change which introduce stress into the system. In a real sense, therefore, occupational role stresses may be seen as a consequence of change occurring elsewhere in the system, and may also be seen as the cause of the change occuring in the system, depending on the perspective or focus involved.

CHAPTER IX

THE DYNAMICS OF OCCUPATIONAL BEHAVIOR

Occupations have been described in terms of the concept of situs in previous chapters. We stated that an occupational situs consists of a number of positions that the practitioner holds in various work groups connected with his occupation. Each one of these positions contains a repertoire of roles that relate to the functions performed by that individual in each of the groups involved in his occupation.

It is possible, using the concepts already outlined, to visualize occupational behavior in terms of the time dimension. There are two aspects of this dimension that need to be considered. The first relates to the daily, weekly, and annual round of behavior associated with a given form of occupational situs. The second may be called the career pattern, or the life cycle, of an occupation. A brief review of the application of role theory to these two dimensions is given below.

Occupational Work Cycles

As already noted, each occupational situs consists of a number of positions containing a number of roles. These positions and roles pass through active and latent states. In the latent state, the occupational roles and positions consist of knowledge, skills, and habits stored in the personality of the occupational practitioner. In other words, in the latent state, the occupational situs consists of knowledge about how to perform occupational behavior. Each role that has been learned by the occupational practitioner and stored within his personality is associated with at least four situational dimensions that act as cues to the actor in bringing his occupational role out of the state of latency into one of activity. These cues are associated with (1) time, (2) place, (3) alter actor, and (4) function. That is, each role has a certain segment of time within which it is defined as appropriate, and other segments of time when it is defined as inappropriate. Similarly, each role has associated with it a certain set of surrounding circumstances, or a certain place, that contains various objects with which the role is associated. In addition, roles performed by occupational practitioners are associated with certain kinds of alter actors toward whom the role is performed. Finally, they are associated with certain functions that need to be performed in group situations. If a certain configuration of time, place, alter actor, and function occur, the occupational practitioner is expected to perform a given role. These four dimensions of situations act as cues to bring into a state of activity the role expectations that apply to that particular set of circumstances. The daily work cycle of a person practicing an occupation may be viewed, therefore, as consisting of a sequence or pattern of activity-latency on the part of the various roles that comprise the occupational situs. For a period of time, the occupational practitioner actively occupies a given one of his various occupational positions and interacts with members of one of the various groups involved in the multi-group system within which the occupation is practiced. Within this group, and in the context of that position, he performs one of his roles. This role is active for a period of time, and then the actor shifts to a different role, perhaps within the same position, or he may shift to an entirely new position in a different group structure where another role becomes active.

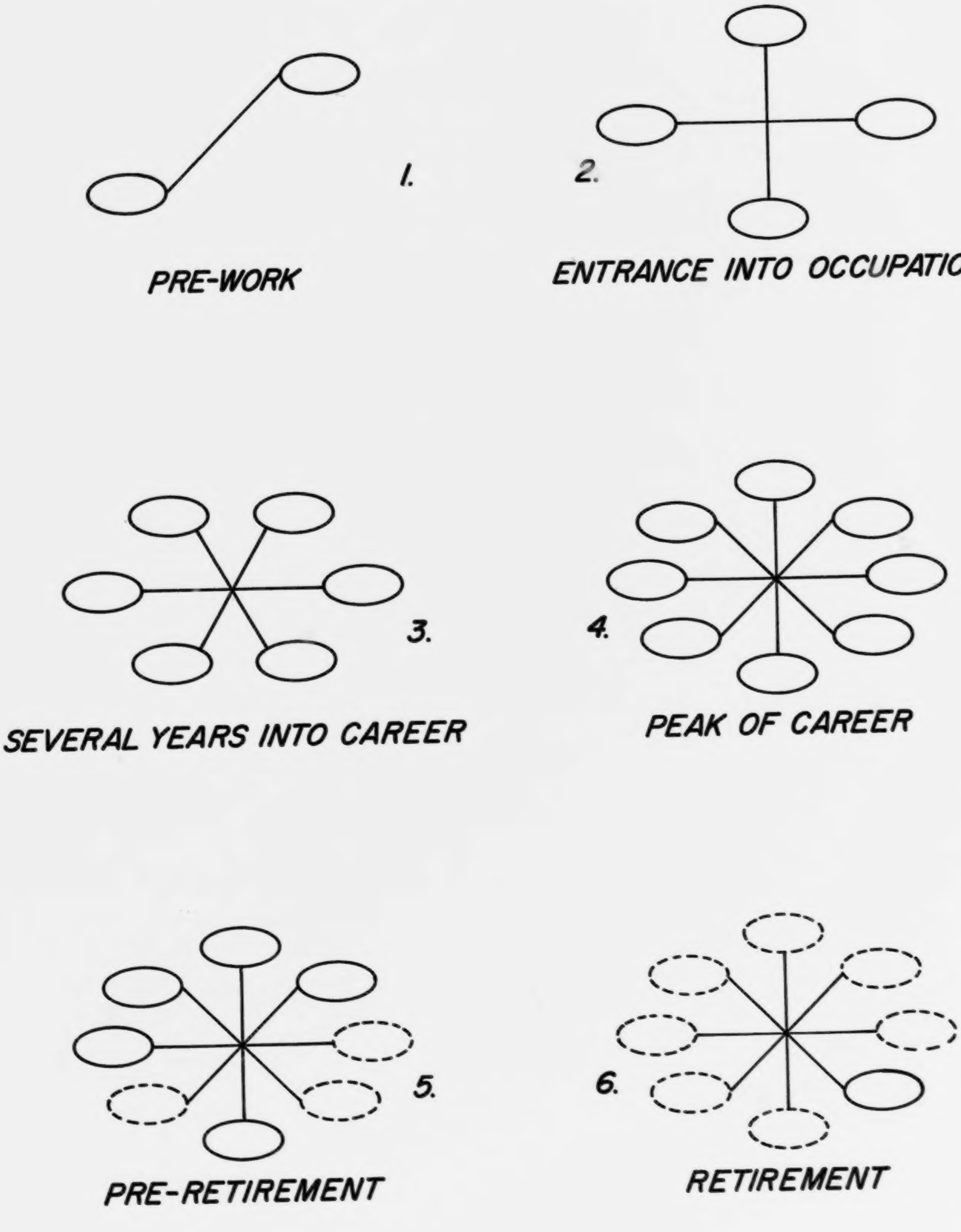
Each occupation will have a typical rhythm and sequence that gives a pattern to its activity-latency characteristic with respect to the various positions and roles contained within the occupational situs. These rhythms and sequences will have daily, weekly, and annual cycles contained within them. In addition to this, the occupational sequences and cycles will be lodged, as part of the person's total station in society, in larger systems and cycles of behavior. Just as such patterns may be discerned with respect to work and occupation, they may be discerned with respect to the person's kinship affiliations, his neighborhood and community connections and so forth.

We see, therefore, that the occupational situs consists of a set of behavior expectations that are organized in terms of group structures, and, within group structures, in terms of functions around which roles are organized. The set of expectations that give structure to the occupational situs give organization to occupational behavior. In other words, the normative system which specifies the expectations associated with a given occupation will give form and structure to the behavior of the person practicing the occupation. This form and structure, in both the organization of the individual's behavior and in the structure of the occupational situs in terms of normative expectations, will vary from one organizational context to another. Thus, the same occupation, lodged in different organizations, will take on a different form in both its normative and its behavioral sense. A secretary for a university will, therefore, behave differently from a secretary to a lawyer in a law firm. This will be true because the positions and roles contained within the occupational structure and the behavior emitted by the occupational practitioner, will fit into a different system of groups containing different roles.

Occupational Career Patterns

Just as it is necessary to visualize daily, weekly, and annual cycles in occupational behavior, it is necessary to be able to describe the life cycle of a person as it relates to a given occupation. This can be done in the same terms as already outlined. It should be apparent that the occupational career pattern can be viewed as a process through which an individual becomes assigned to an occupational situs and builds within it a set of positions and roles that comprise a full complement of positions and roles for a mature occupational situs. (See Figure 15.) This statement can also be made as follows. We may visualize the occupational career of a given individual as being a process through which the individual adds positions in work groups to his occupational situs and builds a large complex structure of positions that comprise full occupational participation. The novice secretary, for example, joins the university staff as a secretary within a given academic department. The first position she occupies is in a group consisting of several other secretaries, herself, and the faculty of the department. She has already learned the technical roles associated with being a secretary. She

THE GROWTH OF AN OCCUPATIONAL SITUS



1. PRE-WORK

2. ENTRANCE INTO OCCUPATION

3. SEVERAL YEARS INTO CAREER

4. PEAK OF CAREER

5. PRE-RETIREMENT

6. RETIREMENT

FIGURE 15

knows how to type, take shorthand, the rudiments of filing, making appointments, and so forth. This becomes the first position in her occupational situs within that organization. Soon she learns that in order to fulfill the roles contained within this position, she must relate to persons outside of the department. For example, she must relate to the secretary in the dean's office. She, therefore, adds a new position to her occupational situs in an interstitial group which exists between the department for which she works and the dean's office. Later, she learns that certain of her duties require her to interact with members of the business office, and a new position with a new set of roles emerges. Still later, she learns that she must perform roles in another group comprised of persons in the library and herself. Thus, new positions, each containing new roles, are added to her repertoire of positions and roles to form the occupational situs.

These positions and roles existed within the occupational situs prior to her entering it. They are lodged in the structure of the organization within which she carries on her occupational behavior. In a sense,she is fed gradually into the system as she becomes a participant in first one group and then another, and performs behavior within these various contexts.

Let us assume that when she begins to work for the particular organization, she is a subordinate to an office manager. As time progresses, the office manager leaves and she replaces him in a new position within the original work group to which she belongs. When she occupies her new position, still acting as a secretary within the context of her original occupation, she finds a whole new set of group memberships necessary to the performance of her occupational duties. Still new positions, then, are added to her occupational situs, and old ones are dropped.

Let us assume that she remains office manager until the time of her retirement arrives. At this point, her occupation moves entirely into a latent state. The various group memberships, and the roles associated with them, become latent, more or less permanently. Instead of the daily, weekly, and annual cycles governing the pattern of activity-latency, we now arrive at a point where the entire occupational situs becomes latent, and the roles are no longer performed.

In this way, we can see an occupational career pattern as a progression through which new positions are added to the situs of a given individual, and old ones are forced into a state of latency. The situs is built and changed gradually as the individual passes through his career. In these terms, upward mobility amounts to assuming a new situs structure containing new sets of positions, each new situs containing higher levels of income, power, authority, prestige, and so forth.

Phenomena such as retirement and unemployment may be thought of as either voluntary or forced latency in the entire occupational situs. Some of the problems associated with both may be accounted for by the fact that the individual has learned the occupational roles, and the cycles and patterns of their performance. These have been fitted into the larger station organization of the individual, but have become latent, causing the need to readjust the structure of the entire station. This is true both in terms of normative structure (that is, what people expect in the way of behavior of the individual) and in terms of real behavior. In the state of retirement or unemployment, a segment of the person's total station is held in a state of inactivity. Change in the time, energy, and effort previously spent on the occupation, as well as loss of rewards, both tangible and intangible, must be compensated for by a reorganization in the life pattern of the individual, in short, by restructuring his station in society.

Non-Vertical Occupational Mobility

Horizontal Mobility

Two other forms of occupational mobility may be discerned in terms of the concepts already outlined. The first may be called horizontal mobility; the person changes from one occupation to another and therefore, the new occupation situs contains a different set of dominant work roles. The person changes from a secretary to a bank clerk, or from a salesman to an insurance agent. In such mobility, the person occupies a new occupational situs organized around a different set of dominant roles.

Horizontal mobility is probably most characteristic within a given status or rank level within a social system. A person is most apt to change from one occupation to another within the same general income, power, and prestige level. A second type of horizontal mobility amounts to changing jobs from one organization to another, while still maintaining the same occupation. This may be called "within occupation" horizontal mobility as opposed to "between occupation" horizontal mobility.

Diagonal Mobility

A different type of occupational mobility may be characterized as diagonal mobility. It occurs when a worker changes both his horizontal and vertical position with respect to the world of work simultaneously. It can be accomplished in two ways. A person may change from a lower ranking occupation to a different occupation of higher rank. He changes from being an insurance salesman to a lawyer, for example. In so doing, he changes his job from one organization to another. Thus, he has moved horizontally from one organization to another and vertically by assuming an occupational situs of higher rank. The other way in which this can be done is by staying within the same occupation but changing organizations for a job within the occupation of higher rank. Thus, an assistant professor at university "A" changes jobs to university "B" and in the process becomes an associate professor; or a vice-president for corporation "A" changes to corporation "B" as president.

Any one of the changes referred to would be accompanied by a change in the structure of the occupational situs. The situs would contain new positions and the positions would contain a different configuration of roles. Since this is true, occupational mobility may be traced by studying changes in occupational situs structure and organization. Since any change in situs structure is likely to result in stress with other situses contained within the person's station, all forms of mobility mentioned above are apt to result in readjustment in the total life behavior of the individual as represented by his station. The patterns with which the person carries out his kinship obligation, for example, may be changed when the patterns associated with his occupation are changed.

Occupational Socialization and Recruitment

The socialization of a person into an occupation amounts to a teaching-learning process through which he learns the various roles associated with his occupational situs. This socialization process may take place primarily in a vocational or non-vocational school and continue through various stages of formal education, or it may be carried on through either formal or informal apprenticeship. Whichever form occupational socialization takes, the individual usually begins by learning the skills and behavior expectations associated with dominant occupational roles. As he begins to participate in actual work groups associated with the occupation, he begins to learn the requirements of other roles associated with this dominant set of behavior expectations.

The paragraphs above, which describe the addition of new positions and roles to the occupational situs as the person assumes full participation in the occupation, afford a model through which socialization can be studied. As new positions and roles are added in new group situations, other members of the groups engage in socializing behavior with respect to the occupational practitioner. The secretary is trained in the secretarial school to type and take shorthand, to do filing, and perform other dominant occupational roles. When she enters a work group in an organization, new socialization behavior takes place through which she learns various other roles associated with her occupational situs. This new socialization behavior may also vary from informal, unplanned apprenticeship, to deliberate apprenticeship training, to formal schooling, depending upon the organizational context.

If all of the specific occupational situses assigned to specific people in a given society were exactly alike, pre-work socialization could prepare the individual for virtually all the roles necessary to performance of the total occupational situs. However, most occupations fit into a wide variety of organizational contexts and prepare a person for a variety of jobs. It will be necessary for some socialization behavior to be carried on by the particular organization into which the occupation fits, after the neophyte enters the world of work. This may be done through both formal and informal means, using an apprenticeship system or formal schooling.

Pre-work occupational socialization normally prepares a person for the first stage in a career pattern. As an individual progresses through stages in the career pattern, socialization must continue so that the individual may learn the new positions and roles added to his occupational situs. This, again, may be done through informal group means or through formal training.

Recruitment into an occupation may be regarded as beginning when an individual starts to learn the first behaviors expected of a person in a given occupation. As the first skills are learned, and the first norms become known to the individual, in a sense, he is already partially recruited into the occupation. Recruitment, therefore, must be regarded as a gradual process that accompanies socialization. It is, in a sense, an expression of the same process of socialization over a period of time. Normally, we speak of a person as having been recruited into an occupation when he regards it as a career possibility, or when he actually assumes active work participation of that occupation. Thus, recruitment and socialization are part and parcel of the same process through which the individual gradually becomes committed to an occupation.

CHAPTER X

SOME METHODOLOGICAL NOTES ON THE STUDY OF OCCUPATIONS

In order to employ the conceptual scheme presented in the preceding chapters, a combination of research strategies, methodological approaches, and data gathering techniques must be employed. At present, role studies do not lend themselves well to quantification. This statement is made despite the fact that numerous attempts have been made to quantify role study data gathered through the use of interview and questionnaire techniques.

The Problem of Occupational Description

At this point in the development of our knowledge of occupations, and of the application of role theory to their study, the basic methodological problem is one of description. How are we to identify the various roles that comprise the repertoire of behavior assigned to an occupational practitioner? Having identified these roles, how are we to determine their content in terms of normative expectations? In another sense, assuming that we can conceive of occupations as situses containing a number of positions, how are we to arrive at a description of situs structure?

Our methodology must be such as to permit us to study an occupation that is completely unknown to the investigator at the outset. In the past, too many occupational studies that have employed role theory have depended on prior knowledge by the investigator of the occupation. This has resulted in the researcher formulating a series of interview questions or constructing questionnaire items drawn from his own experience, which in effect asks the practitioners of an occupation to agree or disagree with his perception of the occupation. Thus, most occupational studies have been based on interview material gleaned from questions asked by interviewers who have more or less determined in advance what they think the content of the occupation is, on the basis of personal experience or armchair analysis. A methodology that depends on prior knowledge of an occupation obviously is limited. It is also, obviously, based on some form of prior observation of the occupation by the person formulating the questions to be asked. The methodology posed here is built around the assumption that we need to safeguard ourselves against limiting or biasing the data we collect, by our preconceptions of occupational content.

Data Collections Methods

As pointed out above, the basic methodological problem concerned with the application of role theory to the study of occupations is one of description. We need to be able to describe in great detail the behavior carried out by persons who practice occupations, and, simultaneously, we need to arrive at a means of describing the norms or behavior expectations held by themselves and others toward practitioners of the occupation. In the paragraphs below, the techniques of observation, interviewing, and questionnaire utilization, as they apply to this problem, will be discussed.

Observation

Given the best of all possible worlds, and unlimited time and resources at the disposal of the researcher, one can hardly argue against observation as a method of obtaining information on occupational behavior. Ideally, to study a given occupation, an observer should be assigned to view the behavior of a sample of occupational practitioners and to record, in as great detail as possible, what he sees them do. It is highly recommended that, in the use of such observation, no biasing assumptions be made at the beginning of the observation. That is, if one assumes that all work behavior takes place within a given location--for example, within the walls of a factory--and observation is therefore carried on only within the confines of a given situation, a great deal of occupational behavior may be missed. Insofar as possible, the observer should record the total behavior of an individual engaged in the occupation under study and only after recording his observations should decisions be made about what parts of the behavior of the individual are to be included within the occupation and what parts are to be excluded.

Identification of Roles and Positions through Observation

In order to identify positions and roles, the observer should focus his attention on a number of things. First, he should be careful to record information about the persons with whom the practitioner of the occupation comes in contact. This should be done in such a way as to identify them not by name alone, but by the kinds of positions and roles they seem to be playing toward the practitioner of the occupation. By identifying the individuals with whom the worker comes in contact, it should be possible, in analysis, to identify the various groups he participates in as a practitioner of the occupation, and thereby to identify the positions he occupies within these groups.

Care should also be taken in recording facts about the time at which behavior takes place, its location in physical space, and in the surrounding circumstances applying to it. These time and place identifications of behavior should aid in identifying roles within positions and in separating one work group in which the actor participates from another within which the same person is observed acting as a participant.

The most difficult aspect of observation will be to record not only the acts one sees performed, but to describe, insofar as possible, the kind of function these acts seem to be performing in the groups where they take place. The most common problem with observers is their tendency to record gross observations rather than detailed facts about what they see.

Precision of Observations

The observations needed for the study of occupational behavior lie somewhere between the kind of data gathered by the time and motion expert, who records even small muscular movements, and a gross description, such as saying the worker is engaged in welding behavior. To say a worker is welding, is to identify a role or possibly an entire occupation, rather than to identify the behavior that goes into the occupation. For thorough, accurate, and scientific study, we will need descriptions of how people weld and what they do in the process, since it is really this that we are studying.

We are accustomed to making summarizing statements about certain activities that we regard as commonly understood in society. The scientific observer, however, should avoid summarizing, especially by using cultural stereotypes, in favor of greater detail. Too much detail may be summarized later, but a summarizing statement cannot be broken down.

The Sampling Problem and Observation

There are two sampling problems with respect to the application of observation to occupational studies. The first sampling problem is one of selecting the practitioners of the occupation to be observed. Sampling theory in statistics deals amply with the problem of selecting subjects from a population so that generalizations may be made to that population on the basis of a small sample. Since there seem to be no unique problems involved in the study of occupations in this regard, standard sampling procedures should be applicable. It should be pointed out, however, that certain occupations contain such a large variety of work settings and organizational contexts that to generalize to the entire occupation would take a very large sample. Caution should, therefore, be exercised not to generalize beyond the particular subvariety of occupation being studied, if a small sample is used. For example, secretaries are employed in so many different kinds of organizational contexts and work situations, that a very large sample would be necessary to assure coverage of the entire secretarial occupation.

Since observation is so time consuming and costly, it is unlikely that it could ever be employed with such a large sample. Most observational studies, therefore, will have to consist of studies of a restricted group of job situations and organizational contexts. For example, only secretaries employed in academic departments at universities might be observed. Here the sampling problem becomes one that is manageable in terms of the size of the university population.

A Time Sampling Model

A second sampling problem is a much more difficult one. It involves the length of time that is devoted to observation. If an observer is sent into the field to observe, let us say, the secretarial occupation in an academic context, the question becomes: "How long should he observe the behavior of each subject before he knows that he has an adequate sample of the total repertoire of behavior characteristic of that particular occupation and that particular setting?" Should he observe the secretary for one, two, three days; several weeks; or an entire year? Should he randomly select time periods within a larger time cycle to base his observations on? He knows in advance, from the theory of occupations, that individuals do not perform all of their occupational behavior each day, nor do they perform it normally in a cycle that lasts only a week, but he knows that there are monthly and annual cycles. How long then, should an individual observe a given subject before he is sure that he has adequately sampled his behavior?

The writer has developed a sampling model that may eventually have some validity for the application of observational techniques to these purposes. It is based on the notion that behavior can be broken down into units called acts or incidents. An act is a unit of behavior considered to be a complete performance by the actors involved, and usually occurs as a unit. This has been discussed earlier, where it was suggested that answering a telephone call on the part of a secretary represents an act. The act involves responding to the bell, picking up the telephone, answering, responding to the caller, and eventually hanging up. After doing this another act might begin, that of typing a letter, for example. This act would begin with putting paper into the typewriter, punching the keys, and finally completing the letter, taking it out of the typewriter and taking it to the boss for his signature.

Obviously, there are difficulties in defining the size and nature of an act, but let us assume for purposes of discussion that the total behavior of an individual can be broken down into units called acts. Let us assume also, that, at the first moment of observation, the observer has seen no previous behavior on the part of the individual being observed. The first act performed will be "new data." If he observes for a period of time, acts will begin to repeat themselves and become "old data," that is, he will have seen the act performed before. For convenience in shaping the sampling model, let us divide the observation period into time units numbered from one to N. These time periods could conceivably be hours, days, or any period of time we wish to use. For our present purposes, let us assume that they consist of days, and that during a given day we are going to be able to break down the total behavior observed and recorded by an observer into unit acts. Let us assume also that on the first day no acts repeat themselves. This obviously would not occur in actual practice. For example, in observing a secretary, she might answer the telephone dozens of times during the first day of observation. But let us assume for purposes of argument that no act repeats itself. Therefore, on the first day, or at T-1, one hundred percent of all the acts can be classified as "new." Let us move then to the second day of observation and assume that at the end of the second day's observation we are able to classify the material into unit acts again and then to compute the number of new and old acts observed this day. That is, any act performed on the previous day will be classified as old, and any act not observed on the previous day will be classified as new. On the second day there should be some repetition of the behavior recorded on the previous day. Let us say that the proportion of new acts drops from one hundred percent to eighty percent. Moving to the third day, we would expect the proportion of new acts to drop still further, and on the fourth day and fifth days to similarly decrease. Eventually, we would expect some point to be reached where the proportion of new data becomes very small in comparison to old data.

That is, the observer will only be seeing a small number of new things as he observes. At this point, a curve has been established that approaches an asymptote paralleling the base line, as shown in Figure 16. Once this condition has been reached, further observation will yield very little new information, and after several days of observation where the proportion of new data as compared to old changes very little, it can be assumed that further observation will yield very little in the way of

TIME SAMPLING MODEL

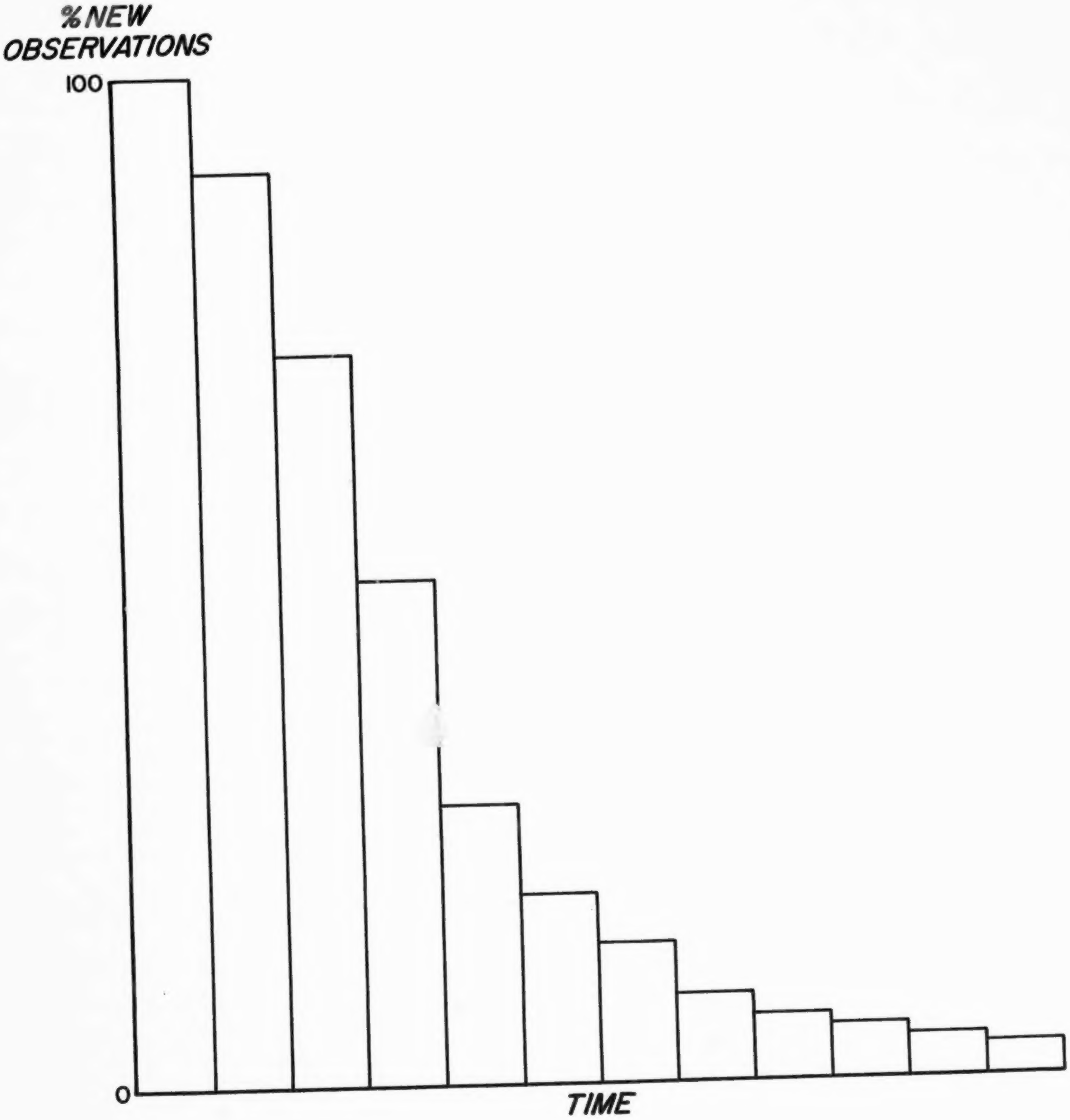


FIGURE 16

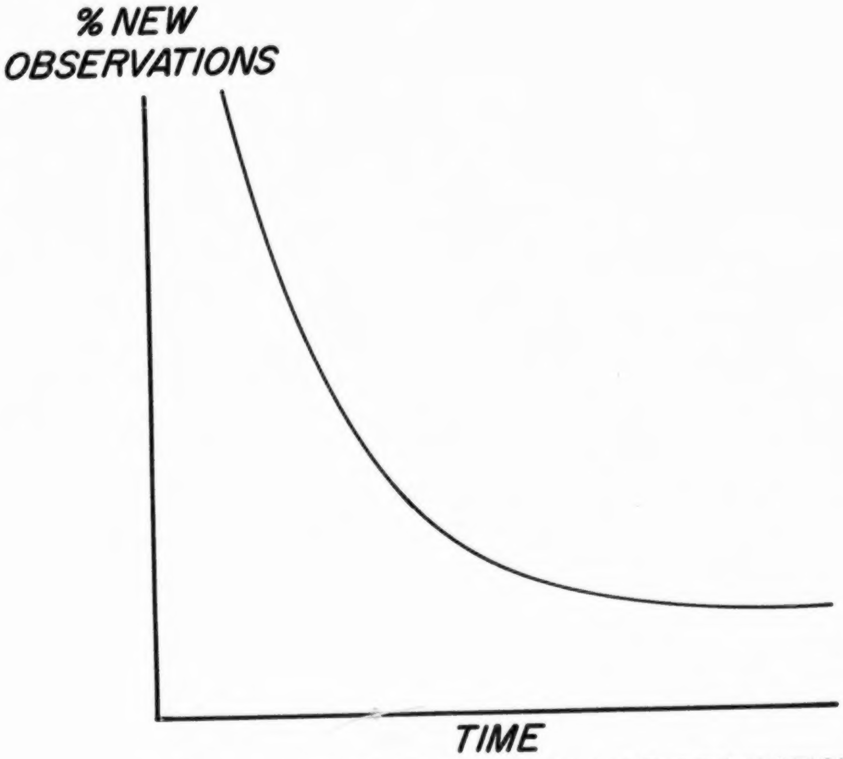
new results. It could, therefore, be stated as a general rule that when the proportion of new acts levels off, observation of that particular individual will cease and observation of a new subject will begin. Each subject will be observed using this same model. That is, having observed an act on the part of Subject "A" will not result in it being classified as an old act when the same behavior is observed on the part of Subject "B." In order to apply this model, it is not necessary to have the observation period classified as a day, nor is it necessary for it to be applied on successive days in the behavior of an individual. In other words, times 1, 2, 3, and 4 need not be equally spaced and need not occur on successive days. Some definite advantage could be gained by having these periods randomized.

It might turn out that cycles will be observed in an occupational behavior, because the curve will descend for a while and then suddenly jump up as a new cycle of behavior is begun. For example, suppose secretarial behavior were being observed, and part of the duties of the secretary, perhaps in a doctor's office at the end of the month, would be to prepare the monthly bills for patients. If we began observing at the beginning of the month, after several days of observation, the curve of new observation would descend rapidly and begin to level off. Suddenly, the end of the month arrives and bill-writing kinds of behavior emerge as brand-new observations. This would cause the curve to take a sudden jump upward, then rapidly descend again to the earlier level.

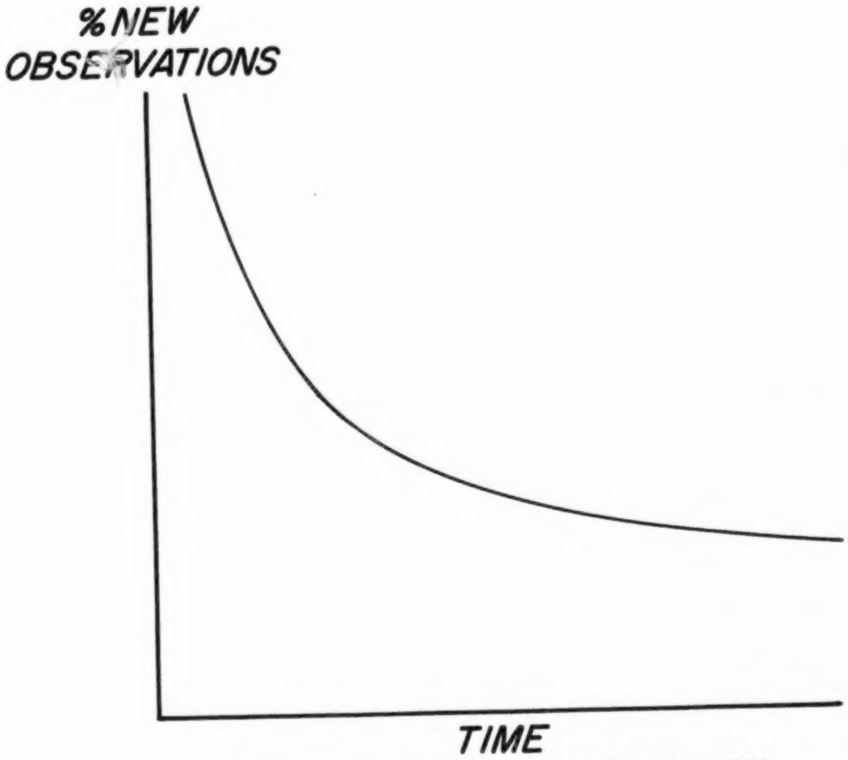
Several points can be made by using this time sampling model. It should turn out that occupations differ in the level at which the time sampling curve reaches the asymptote. The curves of some occupations that are highly routine and repetitive, such as production line work, should descend very rapidly and level off at a very small percentage of new observations each day. This is illustrated in Figure 17. This would be true, because each day's work on the part of the production line worker would be almost exactly like the previous day's work. Other occupations would display an entirely different curve. Instead of descending rapidly, the curve would descend very slowly and level off at a much higher level. For example, observing the behavior of a college professor might result in such a curve, where, in order to get the total repertoire of behavior, a much longer time period would have to be expanded in observation. Once the percentage of new observations had leveled off, there would be a large unaccounted-for variation, where we did not reduce the number of new observations significantly by continuing observation for longer periods of time. This would indicate that one occupation is much less structured and repetitive than the other, and a great deal of area for variation is left to the individual's discretion. It could mean that personality, situational, and interactional factors enter into variations in behavior above and beyond the effects of the occupational norms.

In a sense then, the rate at which the curve shown in Figure 17 descends and the level at which it approaches the horizontal, may be used as measures of the structuring of the occupation and its complexity. Simple occupations should have a curve that descends rapidly, while complex occupations should have a curve which descends at a much slower

COMPARISON OF OCCUPATIONS



HIGHLY ROUTINE PRODUCTION LINE OCCUPATION



VERY UNSTRUCTURED OCCUPATION

FIGURE 17

rate. Also, in addition to this, highly structured occupations should reach a very low percentage of new observations after leveling off, while very unstructured ones should level off at a much higher percentage of new observations made in successive time periods.

Another application can be made of this curve. It can be used to assess the degree to which personality affects occupational behavior. Suppose a sample of practitioners of exactly the same occupation were selected, and their occupational situations and interaction settings were matched. For each person observed, a similar curve could be established. Observing one person, we might find that the curve descends rapidly and levels off at a relatively low point, while with another person it might descend rather slowly and level off at a higher point relative to the total distribution of persons within that occupational field. The rate at which the curve descends and the level at which it becomes horizontal then could be used as measures of the effect of personality on role. Person "A," as shown in Figure 18, would have a much more conformist-type reaction to occupational role expectations than person "B." His personality might be described as more rigid or structured than that of person "B." In Figure 18, the "average" curve for the members of the occupation is shown along with the curve for the particular practitioner being compared to the average. A similar utilization of this distribution could be made for assessing the effects of situation, if personality and occupational role expectations are held constant.

This sampling model does not overcome the difficulties inherent in observation. These difficulties, aside from those of sensitizing the

COMPARISON OF PERSONS HAVING THE SAME OCCUPATION

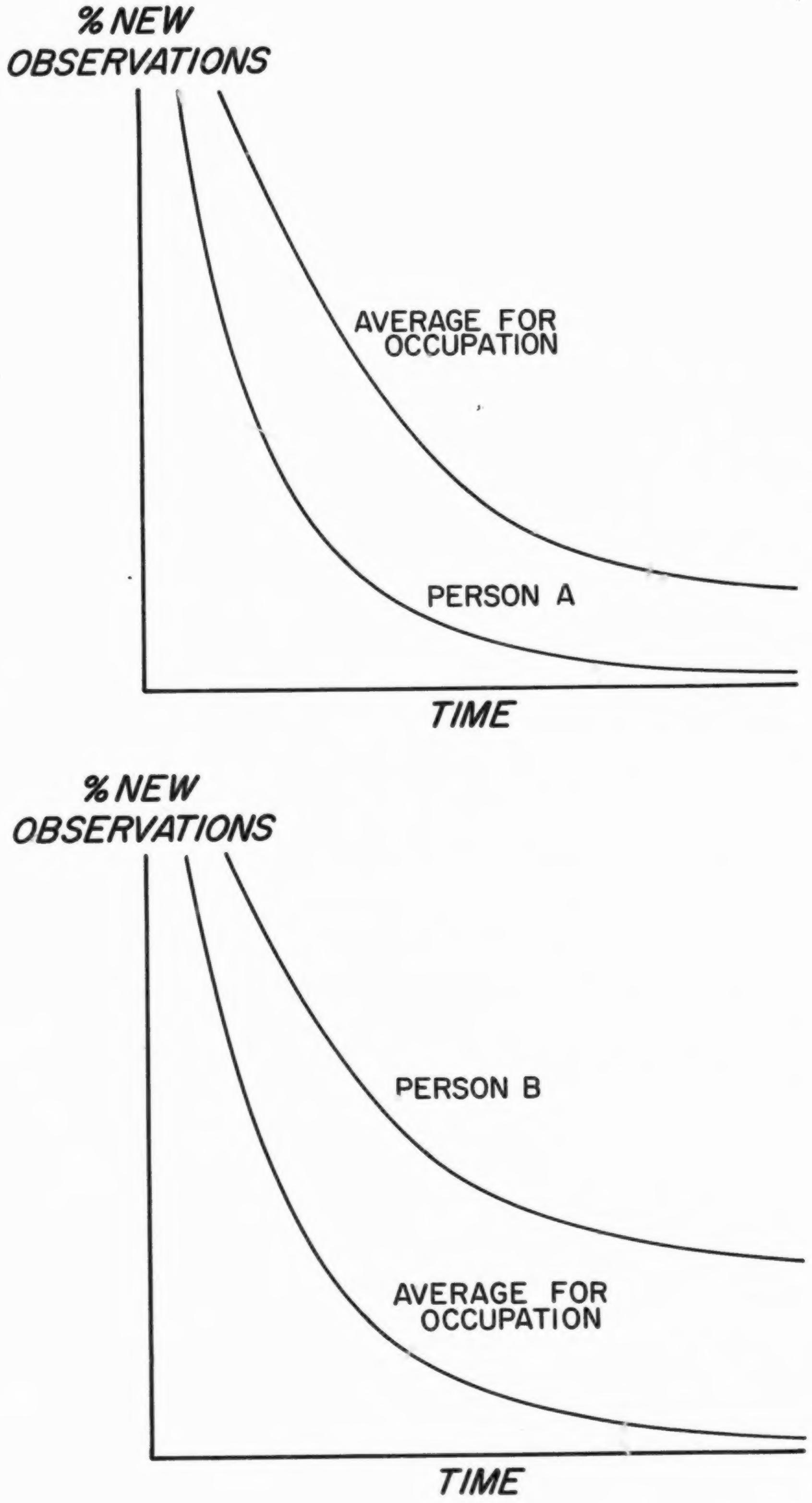


FIGURE 18

observer and training him to record the data, are numerous. First, observation is apt to disturb the behavior of the individual being observed and, thereby, modifying it, producing biased or unrealistic data. Second, and perhaps more important, since there is some hope of cross-checking observer effect, its cost is high. It takes one observer to observe one person and to adequately record his behavior. Thus, large samples are out of the question simply from a time-cost point of view. What is lost, however, in terms of the size of the sample is gained in richness of detail and in the elimination of the perceptual effects and attitudinal biases introduced by asking a subject to report his own behavior. It is suggested that observational methods be used in pilot study attempts to find the limits of occupational behavior and to assure the investigator of not leaving out of his considerations significant items which might be missed if questionnaire-interview techniques were used without being preceded by observational techniques.

A very important point needs to be noted in connection with the use of observation. Norms consist of ideas that people have about how they ought to act, rather than of actual behavior that is necessarily observable to a researcher. When one has recorded the behavior of an actor, he is left with the problem of deciding what part of that behavior is shaped by the role definitions and norms applying to the occupation, and what part is affected by the situation, personality, and interaction variables. The sampling model and its application noted above suggest a possible long-run way out of this dilemma. In observing real behavior, it is frequently the case that statements are made by people that reveal their normative expectations. Particular attention, therefore, should be paid to statements made by individuals that contain normative prescriptions, such as "You should do so and so," or "I ought to have done so and so," or "So and so expects me to do this, that, or the other." Furthermore, particular attention should be paid to sanctioning or social control behavior that may give cues to the norms that regulate behavior.

Obviously, the observer need not remain entirely silent in the observational situation. It is perhaps desirable to stage observation in two phases. In the first phase, the observer merely records what he sees without asking questions or entering into discussions with the person being observed, if at all possible. In the latter stage, he should ask questions and use an unstructured interview technique to determine how the person views his own behavior and what norms he thinks apply to it.

Interviewing

Interviews, used for the purposes of constructing descriptions of occupational norms or occupational behavior, essentially convert the subject into an observer for purposes of the study. That is, when one interviews a secretary with the object of determining what her duties are, he is asking her to report as an observer of her own behavior or the behavior of others in similar positions, or to report the kinds of behavioral expectations or norms that apply. Thus, in a sense, the interview yields secondary data. It is a report to a researcher of an observation made by a subject, and is, therefore, one step further removed from the reality of occupational behavior than direct observation would be. It has obvious advantages for determining normative content, attitudes, and values connected with the structure of occupations.

The Day's-End Interview

Since interviews in a sense turn the interviewee into an observer, one direct use of interviewing might be for this exact purpose. An interviewer may interview an occupational practitioner in order to get him to report his activities during a given day or other given time period. For the sake of convenience, let us call this the "day's-end interview." The day's-end interview consists of a series of questions, asked by the researcher of a subject, designed to get him to report his activities during a given day's time. The interviewer begins by asking the subject what he did when he first arrived at work in the morning, what he did next, and so forth, probing for details of occupational behavior along the way. Thus, the day's-end interview is substituted for observation. It has the obvious advantage of saving time on the part of the observer, and the obvious disadvantage of losing the richness of the detail and the accuracy that might be possible in direct observation.

Time Sampling and Interviewing

The same sampling techniques suggested above can also be employed to determine the number of day's-end interviews that are needed with a given subject before that subject has revealed all of the information he is likely to give. The day's-end interview has an obvious defect in that it might affect the behavior of the interviewee if he knew in advance when the interview would be, and thereby be able to modify his behavior. This same objection, however, applies to observation.

As a substitute for the day's-end interview, a daily diary might be used. Both of these techniques require the researcher to train the interviewee in making observations and reporting them in detail. In a sense, the same kind of process would be used as is employed between the psychiatrist and his patient. In effect, the psychiatrist trains the patient to report both to himself and to the psychiatrist the details of his own behavior and feelings.

Once a series of day's-end interviews has been conducted, or a period of observations has been experienced, a much more efficient technique of interviewing or questionnairing may be adopted. At this point, the items necessary for a structured interview or questionnaire can be drawn from data already collected. Interviews and questionnaires can be used to expand the results obtained from a small sample, to which observation or day's-end interview techniques have been applied, to a larger sample of individuals, representative of a larger and more general population. At this point, measurement can be introduced into the definition of roles and specific hypothesis tested.

Questionnaires and Surveys

There are several particularly valuable techniques already available, which will aid the student of occupations in identifying positions and roles involved in the occupations. These techniques are usually used in a questionnaire-type survey in which respondents use paper and pencil.

Sociometric Surveys

The first of these is a sociometric survey, designed to determine the association patterns of the individual being studied. In effect, this kind of survey asks the respondent to report the persons with whom he interacts during given time periods. It is important to note that this kind of survey differs from the preference type of sociometry characteristic of Mareno's work. Here, the objective is to identify the persons who are in contact with each other, rather than to identify the emotional reactions that individuals have to each other in terms of liking or disliking each other. Thus, the subject of an occupational study would be asked to record those persons with whom he has contact during a given work day, or work week, and to report something about them that would allow the researcher to identify their occupations and positions within the organization. Such a survey can then be subjected to an analysis, which will aid the researcher in identifying the various groups to which the individual belongs, and, within them, the positions he occupies.

The Social Participation Survey

A similar kind of survey involves the social participation inventory. This social participation inventory, instead of approaching the problem of group affiliation by asking about the persons with whom the individual has contacts, asks about the groups or organizations within which he holds membership and something about the qualities of participation that he has within these contexts. Normally, the social participation survey will elicit information only about groups that have definite names or designations, that are well known to individuals in society, and particularly to the person being studied. This means that interstitial groups existing within organizations and groups that are temporary, or have a shifting membership and have no name, will be missed in the social participation inventory. It is probably true that elemental groups, in terms of the definitions given above, will appear more frequently in social participation inventories than will interstitial groups. Combined, however, the sociometric survey and the social participation inventory should supply valuable data to aid the researcher in identifying the various positions involved in a person's occupational situs.

Attitude Scales and Measurement of Norms

Standard attitudinal scaling techniques have frequently been employed to measure the strength of norms, and little reference needs to be made to them here. It should be noted, however, that the application of attitudinal approaches to the study of social norms depends for its efficacy on the items selected, and the same questions can be asked about items included in such a survey as were asked earlier about observations. Namely, how does one know when he has a sufficient number of items to sample accurately the population or universe of norms that apply to a given occupation? The answer to this question lies in designing such scales with knowledge gained from observations that have been subjected to some kind of sampling criteria, such as those suggested above.

Analysis Hints for Applying Role Theory to Occupational Research

In conclusion, several points need to be made about the application of role theory to the study of occupations. It must be remembered that for each group that a person participates in as a member of an occupation, he occupies a different position. Each one of these positions contains a repertoire of roles, depending on the kinds of functions the individual performs within the group. Roles consist of behavior expectations on the one hand, and of acts on the other, which are performed by one actor toward another actor in certain time and place circumstances, in order to perform a given function. Since this is true, roles can be isolated by using the variables of: (1) time, (2) place, (3) ego and alter actor, and (4) function. That is to say, a role will consist of behavior that is performed within a given time context and in a given place context, by one actor toward another actor, to get a certain function performed. Returning to the original comments made about observational methods, if each act observed is classified in terms of time, place, ego and alter actor, and function; and then sorted according to time, place, ego-alter actor, and functional categories, the resultant collection of acts can usually be identified as a role. Thus, the identification of roles from the data collected by observation depends on keeping an accurate record of these variables.

It should be remembered, that, depending on the purposes of an occupational study, various levels of detail are warranted. This monograph has attempted to provide a framework for a maximum of detail. It assumes that a methodology and theory need to exist, through which minutely accurate and extremely detailed scientific descriptions of occupations can be made. This is based on the belief that, only when such accurate descriptions can be made, will it be possible to test hypotheses about various dimensions of occupations or about different variables which are related to them. In no given occupational study, unless a large amount of time and money were available, would it be possible to collect all of the kinds of data in the wealth of detail recommended here. The researcher will have to decide what level of accuracy and which level of detail he needs in order to create his description for purposes of the problem at hand. It should be remembered, however, that general descriptions should be undertaken only insofar as they can remain consistent with what we suspect to be the case with respect to occupations, assuming we were able to gather in minute detail the data upon which the general description rests.

GLOSSARY OF SPECIAL DEFINITIONS
USED IN THIS MONOGRAPH

Active and Latent Roles: An active role is one that is in the process of being performed by an actor in the present, that is, while the actor is being observed. A latent role is one that has been learned by the actor and is therefore stored in his personality, but is not, at the present, being performed. As I write these words my author role is active and my role as lecturer at the university is latent.

Community: A complex system of human behavior or action that includes behavior in organizations and detached groups. A community is a system held together by conjunctive rather than reciprocal relationships. These relationships are found in interstitial groups that join organizations to each other or groups outside the boundaries of organization to the organization.

Conjunctive Relationship: A conjunctive relationship exists when two people interact as position occupants in order to represent or perform a function for another group or organization and the groups they represent have different and distinct functions. In conjunctive relationships, actors are not working together to perform a common function but interacting because they need each other in order to perform different or even opposing functions. The buyer-seller relationship is a conjunctive relationship.

Elemental Group: An elemental group is one that produces some product, good, service, or function that it provides its members or exchanges with other groups for things its members need. Its members do not represent other groups but perform differentiated roles in the production of a common product.

Extramural and Intramural Roles: An intramural role is one that requires behavior totally within a group toward members of that group alone. An extramural role requires external behavior as a precondition to internal behavior. In an extramural role, norms require behavior that forces the actor to leave the group and perform behavior toward members of another group in order to secure some needed good, service, or function that is prerequisite to internal role performance. The father-husband provider role is extramural in most families in our society because, in order to play the provider role, a man must have a job or occupation that furnishes the where-with-all to provide.

Group: A system of behavior or action performed by actors who occupy a closed set of positions. This set of positions is such that each position occupant plays at least one role toward every other member of the group. Thus, each member is obliged by role requirements to interact directly with every other member. This interaction need not take place with every member at once nor need there be a common role performed towards all.

A different role could be performed toward each member. A group in this sense always consists of a system of direct relationships and never includes indirect relationships.

Interstitial Group: A group whose function it is to join other groups together in order to make an exchange of products or functions possible, to provide a means of coordinating or synchronizing their activities or to control the potential conflict or competition between them. Its members are drawn from other groups and represent those groups in the interstitial relationship system.

Job: A cluster of positions (and their associated roles) that a person occupies in a work organization. A job is the situs of the person in the organization for which he works and includes all of the positions and roles associated with his employment in that organization. Some positions may be in interstitial groups outside the organization and others in both interstitial and elemental groups inside the organization.

Norm: An idea held by an individual that a certain act is appropriate to a given set of circumstances. An idea that a given act is right, proper, wise, efficient, correct, appropriate, justified, legitimate, or expected in a given behavioral context. Norms may be shared by a large number of people or may be unique to a single actor. Norms are usually learned, that is, they are acquired through interaction with others who transmit the norms through socialization. Some norms, however, are "invented" by the actor rather than being transmitted through socialization. There are three classes of norms that relate to three classes of behavior: (1) action norms, (2) emotional norms, and (3) cognative or thought norms. As a kind of idea, a norm differs from other kinds of ideas in that it carries the notion of how a person, for one reason or another, should, ought to, or is expected to feel, think or act. Other ideas fall in the class of information, or questions. For example, the statement, "That plumber has a monkey wrench", is a statement of fact, a bit of information. The statement, "That plumber should have a monkey wrench", is normative in contrast. It says what ought to be a fact rather than what is a fact. Obviously, the statement, "Does that plumber have a monkey wrench?" is still different. Each one of these statements can be made in either the future, past or present tense. They all correspond to different classes of ideas. A norm then is one type of idea. Stated in language terms, it is an idea in the conditional tense.

Occupation: A cluster of positions normally occupied by a class of people in work groups, each of which contains a set of roles defined by occupational norms. In role theory terms, an occupation is defined by the average content of work or job situses of people who perform a cluster of functions in work groups. In a sense, a person's occupation consists of a set of latent roles that become active only when they are associated with a job. Only those work pursuits for which people receive pay are considered occupations.

Organization: An organization is a multi-group system in which a system of elemental groups are joined by one or more interstitial groups in such a way that every member is linked either directly, or indirectly to every other member. Within an organization all relationships are reciprocal, as opposed to conjunctive, in nature.

Position: The space occupied by a person in a particular group structure which consists of all of the norms and consequently all of the roles that apply to that person in that one group. A position consists of the cluster of roles assigned to a single actor in a single group. There is a different position for each group in the structure of society. There is only one position in any single group for an actor. When an actor changes from one group to another he changes positions. An actor, in all but a Swiss-Family-Robinson type society, occupies many positions. In a single organization a person may belong to or participate in many groups and therefore must occupy many positions in that organization. This means that a man's "job" may involve him in occupying a cluster of positions. This cluster of positions makes up a unit of structure called his situs.

Reciprocal Relationship: A reciprocal relationship exists when two actors interact to contribute specialized roles to the performance of a common function. Their behavior is orented toward the accomplishment of the same good or the production of a common product or function. The relationship between carpenter and carpenter's helper in a work group is reciprocal.

Role: A set of expected acts or norms that defines the behavior appropriate to performing a given function in a given group. It consists of a set of norms clustered around a function. These norms furnish a behavioral "blueprint" or "program" for how to act in order to perform the function. Thus a role is a set of norms for action. In another sense it is a set of ideas about how to act in relation to another actor in a given group context in relation to a given function. The typist role for a secretary consists of a set of normative ideas which specify the various behaviors or acts that must, or should, be performed in order to perform the "typist" function in an office. The real behavior in performing the function in the group is a product of the role (definition), the personality of the actor, situational factors that are operating, and the interaction that is taking place.

Role Conflict: A conflict between, or among, norms that apply to the behavior of a single actor. The conflict takes the form of a logical or moral inconsistency among norms. Two contradictory behaviors are both defined as correct or right. In another form, the behavior required by one norm makes it impossible or more difficult to perform the behavior required by the other. This type of conflict involves an inconsistency between two or more parts of the same culture and is therefore built into, and internal to, culture.

Role Frustration: A conflict between the requirements of a role in terms of behavior, and the characteristics of the situation in which the role is supposed to be performed.

Role Inadequacy: A conflict between the personality characteristics of an actor, and the requirements of the roles assigned to him.

Role Non-Reciprocity: A condition where the norms or role requirements assigned to one actor do not coincide to those assigned to the person toward whom he is supposed to perform the role. In interaction, the norms governing the behavior of ego are in conflict with the norms governing the behavior of alter. A conflict between culture and interaction exists.

Situs: A set of positions, all occupied by the same actor in the same organization. The set, or system, of positions occupied by an actor in the organization for which he works in his occupation, or job, situs. The set of positions occupied by the same actor in family or kinship groups form his kinship situs.

Station: A set of all the positions occupied by a person in society that includes one position for every group to which he belongs. A person's total place in society comprised of all of the positions he occupies at any given time. A person's station, therefore, includes all of his situses.

APPENDIX A

An earlier version of the preceding monograph was used as the basis for a seminar on The Application of Role Theory to the Study of Occupations, sponsored by the Department of Sociology and Anthropology, University of Georgia, and the Center for Occupational Education, North Carolina State University. The Seminar was held from January 9 through 11, 1968, at the Regional Office of the U. S. Department of Health, Education and Welfare, 50 Seventh Street, Atlanta, Georgia.

The following excerpts from the program contain a brief description of the nature and major objectives of the seminar, and a list of the participants.

Nature of the Seminar

Dr. Fred L. Bates, a sociologist at the University of Georgia, was commissioned by the Center for Occupational Education to develop a theoretical framework for studying occupations utilizing role theory analysis. Dr. Bates has recently completed a monograph on this assignment entitled, "The Structure of Occupations: A Role Theory Approach." This monograph served as the basic subject matter for the seminar.

Participants in the seminar were expected to (1) explore the use of the "role theory approach" in the study of occupations, (2) assist the seminar staff in assessing the pros and cons vocational education and sociology researchers might attach to this approach in studying occupations, and (3) suggest what might be needed to encourage greater consideration of role theory in occupational studies. In other words, the writer and the Center desired to learn from occupational education researchers the utility of role theory in studying occupations.

The seminar program included opportunities for sharing ideas with the writer as well as time to meet in small groups to apply the theoretical concepts in an occupational study. Hopefully, small groups were able to develop research projects on sample occupations which utilize role theory.

Major Objectives of the Seminar

1. To explore an approach to the study of occupations utilizing a "role theory" model.
2. To develop a better understanding among vocational education researchers of the utility of "role theory" in occupational studies.
3. To stimulate joint occupational research efforts among sociologists and vocational education researchers.
4. To devise research strategies employing role theory in occupational studies.
5. To determine what might be needed by occupational researchers who seek to use the role theory approach.

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Discussion of the Seminar

The seminar was designed as a forum in which the participants could examine and discuss the implications contained in the monograph. In order to facilitate this discussion the participants were divided into three small work groups. Each group was provided with a guide to the application of role theory concepts to the description of occupational structure (Appendix B), and allowed to retire, to seek its own conclusions. The comments and criticisms produced by each of these work groups have been instrumental in determining the final form of this monograph. Many of the points raised were either satisfactorily answered at the time, or subsequently corrected in the manuscript. Some of the points will be of interest to the reader who wishes to know what effect the seminar had on shaping the final form of the monograph. In the following paragraphs we will attempt to recount some of the contributory points. Several of these should serve as a caution to those intending to use the Role Theory Approach in research involving occupations.

One of the major questions raised by the work groups was that of the application of the Role Theory Approach to different kinds of occupations. Some participants felt that the behaviors identified through role theory appeared to be largely social, and may overlook the technological aspects of the occupation, although others contended that role theory could satisfactorily define technological behavior. Furthermore, roles which are difficult to perform may not require regular performance. They must be most vital, but not appear very often. The researcher should take great care not to ignore some vital activities simply because they are performed infrequently. The work groups also pointed out the necessity for a clarification of the definition of function and the necessity for a clear distinction between role and function. It was agreed that any researcher using the Role Theory Approach should have to settle on clear operational definitions. All of the groups agreed on the necessity for a glossary of terms, in order that those terms having special usage in this monograph could be better used by researchers. Such a glossary has now been provided.

A request was made for some prefatory material of a historical nature which would give the reader some idea of the manner in which this theory grew out of traditional theoretical frameworks. The present preface to this monograph is a direct result of that request, and should serve to orient the reader to the historical framework for the present paper.

Another question was raised concerning the Model of Behavior Causation (See Figure 1), and the manner in which perception and motivation fit into this model. Although these concepts do not appear in the model, the reader should understand that they are considered within the personality variable of the model. These constructs are psychological in nature, and are perhaps best left to professionals in that field for more extensive descriptions. For the purpose of this monograph, it should be understood that these constructs are recognized implicitly, however, they are not expressed in the model.

There was general agreement among the participants that the Role Theory Approach had a great deal to offer to study and research in occupational behavior. This approach seems to move ahead of the traditional job analysis, task-oriented approach, into the personal-social realm of human behavior. The strategy has several implications for assessing occupational behavior against a backdrop of change. It has implications for individuals who keep changing jobs: What is the relationship, if any, between job satisfaction and the need to fulfill potentialities for greater situs development? When the human relations of role theory is articulated with task analysis concepts, perhaps the construction of curricula for specific occupations can be improved. Delineating occupational behavior explicitly could result in more successful recruitment of individuals into occupations, resulting in greater job satisfaction. Furthermore, it is to be hoped that the Role Theory Approach will be useful for studying a wide range of occupations. The approach was designed to allow a comparative analysis of a wide range of occupations, using a common terminology. Depending upon the depth of its use, it can provide a precise way of ordering the descriptions of various occupations in order to be able to compare them on certain points.

In general, the discussion was enthusiastic and optimistic about the use of this theory for research in occupations. It is to be hoped that the reader will also find something of benefit to his own interests in these pages.

APPENDIX B

A GUIDE TO THE APPLICATION OF ROLE THEORY CONCEPTS TO THE DESCRIPTION OF OCCUPATIONAL STRUCTURE

Introduction

The following outline presents a set of questions and information items useful in obtaining and classifying data to be used in arriving at a preliminary "seat of the pants" description of the role structure of an occupation. More formal methods should obviously be employed if a high degree of precision and accuracy are desired.

I. Identifying the complement of positions which make up an occupational situs.

  A. Questions which lead to the identification of positions.

    1. Who does the actor interact with in carrying out his full occupational behavior?

      a. Within his immediate work group(s).
      b. Within his organization but in other work groups and offices.
      c. Outside his organization in acting as client or customer of other groups or organizations.
      d. Outside his organization acting as a salesman or professional toward others as a client or customer.
      e. Outside the work organization but in occupational associations or interorganizational consortiums such as labor unions, professional societies, trade associations, etc.

    2. Of these persons with whom the actor interacts, which form distinct groups distinguishable from other groups.

      a. Groups represent closed interaction systems in which every member interacts with every other member.
      b. The actor will participate in two kinds of groups: (1) elemental groups; (2) interstitial groups.

        (1) Ordinarily his primary work assignment will be in an elemental group.
        (2) His between group associations will be in interstitial groups.

        c. For each different group which can be distinguished there will be one position in the occupational situs of the actor.

II. Identifying the roles which form the structure of a single position.

- A. Definition of a role: a set of behavior patterns organized around a function that one actor performs toward another actor in a single group.
- B. Questions which lead to the identification of roles.
  - 1. What functions are assigned to the actor in the group?
    - a. Can the functions be performed separately, *i.e.*, could two different actors conceivably perform the functions?
    - b. Can the functions be performed in different segments of time?
    - c. Can the functions be performed in different locations?
    - d. Do the functions require a different set of objects or equipment?
    - e. Are the functions performed toward different actors?
- C. If the answers to all the questions from a-e above are "yes," then it is certain that two functions being considered are the focus of different social roles. If any one of them is true, it is likely that two roles are distinguishable.
  - 2. Are their recognized occupational designations for different clusters of activities performed by the same actor in the group? (As in the case of the secretary who is a "typist," "stenographer," "file clerk," "receptionist.")
    - a. Do such designations refer to *part* of the duties associated with a person's activities in a group rather than *all* of them? If the designation refers to *all* of his duties, we are dealing with a positional title. If it deals with part of them, we are either dealing with a role or part of a role.
    - b. Are their recognizable role designations as described in "a" which can be identified for "alter" positions. If so, there must be an "ego" role which is complementary. For example, if I determine that there is a role of cashier in an alter position to which a welder position is related, there must be some role in the welder position which is complementary to cashier or pay-clerk, for example, "employee."

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III. Identification of norms or role requirements associated with an occupational position.

A. Norms are the basic elements of roles in the occupational structure. They amount to "expected," "prescribed," or "appropriate" behavior.

B. Questions useful in identifying norms.

1. How is the actor supposed to act in order to perform the function around which the role is organized?

a. What activities is he supposed to pursue with respect to physical objects?
b. What activities is he supposed to perform with respect to social objects (other people)?

2. How is the actor expected to "feel" about various activities and objects in his work situation? (What emotional states are expected of him?)

3. What beliefs, ideas, and information is the actor supposed to employ in carrying out his behavior with respect to the function?

IV. Description of situs structure.

A. Definition: the occupational situs consists of all the positions containing all of the roles a person performs in his job. These positions have definite connections with each other through the existence of extramural role relationships. That is, a role in one position requires a person to perform roles in another position as a requisite for its performance. Therefore, to describe situs structure completely, it is necessary to identify extramural roles and their connection.

B. Roles which require a person to obtain supplies, information, decisions, or other needed resources from outside the group or to "export" one of these from the group are extramural roles. Roles which require supervision from outside or coordination with outside activities are typically extramural roles.

C. No position in an occupational situs can be completely cut off from other positions in the situs. They must be connected by extramural role relationships to be included.

D. It is not required, however, that every position have a direct extramural link to every other one.

V. Dealing with structural viariables associated with situs structure.

A. The spacial dimension or variable: positions and roles composing the structure of a situs have definite spacial coordinates--*i.e.*, the behavior required is locatable in terms of specific situations. This leads to some of the following questions.

1. Within a position, are all of the roles played in the same location, or are they played in different locations?

2. How widely are roles dispensed in terms of situational coordinates?

3. How do situations differ in object content--are all roles played in the presence of the same set of objects, or do objects change as well as location in space?

B. Time dimension variable: the roles composing occupational positions are not all performed at the same time but display definite activity-latency patterns. Some questions in this regard are:

1. Do roles have a definite sequence or cyle of performance or are they phased on a different basis?

2. Which roles seem to be active for the greatest periods of time, and most frequently?

C. Role dominance: roles are not considered equally important. Some are valued more highly than others. This raises the following questions:

1. Which roles are considered most important by various classes of actors?

2. How is role dominance related to the location and timing variables?

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